

**IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF NEW YORK**

Case No. 1:15-cv-09936 (LGS)

RAMON MORENO, *et al.*,
Plaintiffs,

v.

DEUTSCHE BANK AMERICAS HOLDING
CORP, *et al.*,
Defendants.

REVISED DECLARATION OF WALTER TOROUS, PH.D.

July 2, 2018

REVISED DECLARATION OF WALTER TOROUS, PH.D.

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I. Introduction

A. Qualifications

1. I, Walter Torous, am a Senior Lecturer at the Massachusetts Institute of Technology with a joint position at the Sloan School of Management and Center for Real Estate. I am also a Professor of Finance Emeritus and the former Lee and Seymour Graff Endowed Professor at the John E. Anderson School of Management at the University of California at Los Angeles. I received my Ph.D. degree in economics from the University of Pennsylvania in 1981. My areas of research include fixed income securities, equities, and derivative instruments as well as real estate markets, the behavior of stock prices, corporate governance, and financial distress. I have taught courses in managerial finance, investments, and real estate finance at the master's level and empirical methods in finance at the doctoral level. I am currently, or have been, the editor or associate editor of a number of finance and real estate finance journals.

2. I have published peer-reviewed articles on the pricing of a variety of financial instruments including equities, options, futures, corporate debt, and mortgage related securities. I have spoken at numerous academic and business conferences about my research. Throughout my career, I have relied on concepts and tools from the field of economics. Those concepts and tools are directly relevant for evaluating financial investments in any context, including issues related to the fees and performance of mutual funds.

3. My complete curriculum vitae, which includes a list of my publications, is attached as **Appendix A** to this declaration. **Appendix B** lists my testimony in the past four years.

B. Summary of Plaintiffs' Allegations

4. Ramon Moreno and other Named Plaintiffs (collectively, the “Plaintiffs”) on behalf of the Deutsche Bank Matched Savings Plan (the “Plan”) allege that the Defendants—Deutsche Bank Americas Holdings Corp. (“Deutsche Bank” or “DBAHC”), Deutsche Bank Matched Savings Plan Investment Committee (“Investment Committee”), Deutsche Bank Americas Holdings Corp. Executive Committee, Richard O’Connell, John Arvanitis, Robert Dibble, Tim Dowling, Richard Ferguson, James Gnall, Louis Jaffe, Patrick McKenna, David Pearson, Joseph Rice, Scott Simon, Andrew Threadgold, and James Volkwein (collectively referred to as “Defendants”)—breached their fiduciary duties under the Employment Retirement Income Security Act (“ERISA”).¹ Specifically, Plaintiffs allege that Defendants:

- Used the Plan to “promote the business interests of Deutsche Bank” at the expense of the participants by failing to remove and/or not timely removing proprietary mutual funds from the Plan’s investment lineup;²
- Ignored underperformance of the Deutsche Bank proprietary mutual funds, including the Deutsche Large Cap Value Fund;³
- Failed to timely remove three Deutsche Bank-affiliated passively managed funds (also referred to as index funds) (“Proprietary Index Funds”) and replace them with lower-cost alternatives;⁴ and

¹ Throughout this declaration, I define certain technical or financial industry terms when they first appear. Furthermore, I collected these terms in a glossary attached as **Appendix C** of this declaration.

² *Ramon Moreno et al. v. Deutsche Bank et al.*, Third Amended Class Action Complaint, August 25, 2017 (the “Complaint”), ¶¶ 3-5. Proprietary mutual funds in this case refer to the mutual funds managed by affiliates of the Defendants that are offered in the Plan.

³ Complaint, ¶¶ 3-5.

⁴ Complaint, ¶¶ 71-80. The three Proprietary Index Funds that were included in the Plan as of the end of 2009 were the DWS EAFE Equity Index Fund, the DWS Equity 500 Index Fund, and the DWS U.S. Bond Index Fund. A passively managed (or index) fund is a fund that typically purchases all or a representative sample of a given index in order to track the performance of that index. In contrast, managers of actively managed funds often undertake significant research about specific stocks, bonds, market sectors or geographic locations in order to attempt to enhance fund returns or characteristics. This approach enables active fund managers to offer investors the opportunity to earn returns that may exceed the return and/or reduce risk, relative to that of a market index.

- Failed to utilize separate accounts or collective investment trusts to reduce fees paid by participants.⁵

5. To evaluate the above misconduct, Plaintiffs' expert, Dr. Steve Pomerantz,⁶ proposes two performance-based models to evaluate the seven actively managed proprietary mutual funds (collectively, the "Actively Managed Proprietary Funds") offered in the Plan as of December 2009 (the beginning of the Class Period described herein).⁷ In this performance-based analysis, Dr. Pomerantz's Model 1 compares each of the Actively Managed Proprietary Funds "to a comparable Vanguard index fund, or a benchmark index where no comparable index fund is available."⁸ His Model 2 purports to evaluate the performance of each of the Actively Managed Proprietary Funds against the performance of "the most popular, widely-used mutual fund by fiduciaries of plans with over \$250 million in assets as of the end of 2009."⁹ Under both models, Dr. Pomerantz purports to compare the performance of the Actively Managed Proprietary Funds

⁵ Complaint, ¶ 7. A collective investment trust ("CIT") is a pooled investment vehicle that is not registered with the U.S. Securities and Exchange Commission. A CIT is maintained by a bank or a trust, and combines assets across a number of institutions (e.g., retirement plans). An investment manager establishes the objectives that guide investment decisions for a particular CIT. Also may be called a "commingled pool." A separately managed account ("SMA") is an investment vehicle that is not registered with the U.S. Securities and Exchange Commission. A SMA comprises an investment portfolio of stocks, bonds, cash, etc. following a defined strategy and managed by a money manager. A SMA pools assets from a single investor, and is managed on behalf of that investor. The investor dictates the investment objectives. (Vanguard Group, "Equity Mutual Funds and Separately Managed Equity Accounts: Considerations for Taxable Investors," July 2005, DX189.0002-DX189.0003; SEI Global Asset Management, "Collective Investment Trust," 2015, DX179, accessed at https://seicdrupalcdn.azureedge.net/cdn/farfuture/38f4za7ap2-S5w1CgUNSK_OdGZPaB2X9GgJTW114n1c/1518213002/sites/default/files/SEI_CIT_US.pdf; BrightScope, "The BrightScope/ICI Defined Contribution Plan Profile: A Close Look at 401(k) Plans 2014," December 2016, JX137.0071-JX137.0072.)

⁶ Expert Report of Steve Pomerantz, PhD, October 5, 2017 (the "Pomerantz Report"), PX250.

⁷ The seven actively managed proprietary funds that were included in the Plan as of the end of 2009 were the Deutsche Capital Growth Fund, the Deutsche Core Fixed Income Fund, the Deutsche CROCI International Fund, the Deutsche Global Growth Fund, the Deutsche High Income Fund, the Deutsche Large Cap Value Fund, and the Deutsche Real Estate Securities Fund. I collectively refer to these seven funds as the "Actively Managed Proprietary Funds."

⁸ Pomerantz Report, ¶ 83, PX250.

⁹ Pomerantz Report, ¶ 90, PX250.

to the performance of his selected comparators over the period from December 21, 2009 to September 30, 2017 (the “Class Period”).

6. In addition, Dr. Pomerantz purports to evaluate the expense ratios of both the proprietary and non-proprietary mutual funds in the Plan.¹⁰ In doing so, Dr. Pomerantz performs three comparisons. The first compares the expense ratios of both proprietary and non-proprietary mutual funds in the Plan during the Class Period to the median expense ratios that Callan, an investment consulting firm, reports for broad asset categories of SMAs.¹¹ The second compares the expense ratios of the proprietary mutual funds in the Plan during the Class Period to those of “comparable” Vanguard mutual funds. The third compares the expense ratio of the proprietary mutual funds in the Plan during the Class Period to the average expense ratio, reported by the Investment Company Institute (“ICI”), of actively managed and passively managed mutual funds in the same broad asset category as the Plan proprietary investment options paid by other 401(k) plans that are similar size in terms of assets.

¹⁰ A mutual fund provides its investors with an integrated bundle of services that includes portfolio management, recordkeeping, distribution, and shareholder services. The costs of the bundle of services received are measured by what is referred to as an expense ratio. All mutual funds make public filings with the SEC in the form of annual reports and prospectuses. These filings report the expense ratio for each mutual fund share class and a description of the services provided. For example, an investor who invested \$1,000 in a mutual fund with an annual expense ratio of 1.00 percent (or 100 basis points) of fund assets would pay approximately \$10 in fees for the investment over the course of the year.

¹¹ Pomerantz Report, ¶¶ 135-140, 146, PX250. Callan periodically sends an electronic questionnaire to a broad sample of U.S. institutional fund sponsors and investment management organizations seeking information on institutional investment management fees. Based on the responses Callan receives, Callan calculates and reports statistics, including the median, on actual expense ratios paid for separately managed account products by broad asset class as reported by the fund sponsor respondents to the questionnaire. Broad asset classes include U.S. Equity, Non-U.S./Global Equity, Fixed Income, and Alternatives; and the reported median expense ratio of each broad asset class reflect the reported expense ratios of both actively managed and passively managed separate accounts. (Callan Investments Institute, “2014 Investment Management Fee Survey: U.S. Institutional Fund Sponsors and Investment Managers,” 2014, DX177.0004, DX177.0006-DX177.0007, DX177.0010.)

C. Assignment

7. I have been engaged as an expert by Goodwin Procter (“Counsel”), counsel for Defendants. Counsel asked me to review and, where appropriate, respond to the opinions and analyses presented by Plaintiffs’ expert Dr. Pomerantz, including his claims regarding the alleged imprudent inclusion of the proprietary mutual funds in the Plan and the alleged failure to utilize SMAs or CITs. I understand that the Court has limited this trial to evidence pertaining to liability, including the alleged breaches of fiduciary duty.¹²

8. In working on this assignment, I have considered legal filings, deposition testimony, data and documents produced in this case, and materials from the trade press and other publicly available information. I am being compensated in this matter at a rate of \$800 per hour. My compensation is not contingent upon the content of the opinions I form or the outcome of this case.

II. Summary of Opinions

9. Below is a summary of the opinions I have reached based on the documents and data I have reviewed in this litigation to date, the research I have done related to this litigation, and my prior knowledge, education, and experience:

- Dr. Pomerantz has not demonstrated that the seven Actively Managed Proprietary Funds were inappropriate core investment options for the Plan during the Class Period. His method of comparing the performance of these funds during the Class Period to the performance of his chosen alternative funds suffers from numerous conceptual flaws.
 - Dr. Pomerantz puts forth two models to evaluate the performance of the Actively Managed Proprietary Funds over the Class Period, which he labels “Model 1” and “Model 2,” but fails to establish that either model represents an appropriate benchmark to evaluate whether the Actively Managed Proprietary Funds were imprudent investment options for the Plan.

¹² *Ramon Moreno et al. v. Deutsche Bank et al.*, Order, June 1, 2018, p. 1.

- In both models, Dr. Pomerantz assesses the Actively Managed Proprietary Funds relative to his chosen alternative funds based on historical performance of the funds over the Class Period. However, Dr. Pomerantz testified during deposition that “historical performance is actually irrelevant” in deciding which investment options to include or retain in a retirement plan. I find that Dr. Pomerantz’s own testimony invalidates the very analysis that he attempts to use with his Model 1 and Model 2 in ascertaining that the inclusion of the Actively Managed Proprietary Funds in the Plan during the Class Period was imprudent. (*See* ¶ 19.)
- Dr. Pomerantz testified that he has no opinion on whether the alternative funds he selected to use in his Model 1 or Model 2 are appropriate investment options for the Plan. He also testified that he has no opinion on whether the Actively Managed Proprietary Funds or his Model 2 alternative funds are prudent or imprudent. Thus, his models are insufficient to ascertain whether the inclusion of the Actively Managed Proprietary Funds in the Plan represented a breach of fiduciary duty. (*See* ¶ 20.)
- Dr. Pomerantz’s Model 1 evaluates the performance of the Actively Managed Proprietary Funds relative to that of Vanguard index funds. Dr. Pomerantz testified that the comparison to an index fund is a market-adjusted analysis of how an unconflicted choice would have performed. However, the prospectus benchmarks for six of the seven Actively Managed Proprietary Funds were different from the prospectus benchmarks of their Model 1 index fund comparators, and these prospectus benchmarks had returns over the Class Period that differed. Thus, Dr. Pomerantz is not performing an “apples-to-apples” comparison, and therefore, some of the differences in performance that Dr. Pomerantz finds in his Model 1 comparison are the result of using an inappropriate comparator to evaluate the performance of the Actively Managed Proprietary Funds. (*See* ¶ 22.)
- Specific to his Model 2, Dr. Pomerantz testified at deposition that he does not opine as to the prudence or imprudence of his Model 2 options, and that those options represent the “collective wisdom or the collective decision-making of the DC community.” However, if his Model 2 alternative funds are *not* what a prudent fiduciary would have chosen, then the performance of these funds is not appropriate to use in evaluating whether the performance of the Actively Managed Proprietary Funds was consistent with the performance of a prudent option. (*See* ¶ 23.)
- Further, Dr. Pomerantz’s Model 2 distills the “collective wisdom” of the DC community to a single fund within each asset class. In reality, different fiduciaries choose different funds in the same asset class for their own plans. The fact that fiduciaries can and do select from a range of different funds in the same asset class is shown by Dr. Pomerantz’s own analysis where he first identifies the top five funds most commonly used among fiduciaries of 401(k) plans in a given Morningstar category before narrowing his Model 2 options down to a single fund. Each of the other possible funds in the same asset class has its own set of returns, and this range of returns represents what a plan fiduciary can expect to achieve in

selecting an investment option in that asset class for its retirement plan, not the individual set of returns of Dr. Pomerantz's single comparator. (See ¶¶ 24-27.)

- Dr. Pomerantz fails to perform a cost-benefit analysis of the Actively Managed Proprietary Funds, but rather bases his entire performance-based analysis on net returns,¹³ ignoring other attributes of the funds that can provide value to Plan participants, including the type of management and, in many instances, the risk characteristics associated with the funds. In so doing, Dr. Pomerantz erroneously assumes that the Actively Managed Proprietary Funds add no value to participants other than the value captured in measures of net returns. (See ¶ 30.)
- Beyond these conceptual flaws, each of Dr. Pomerantz's models and his chosen benchmarks also suffer from flaws in both methodology and implementation.
 - Some of Dr. Pomerantz's benchmarks have risk characteristics—e.g., prospectus benchmarks¹⁴ and asset allocations—that are different from those of their respective Actively Managed Proprietary Fund. Dr. Pomerantz fails to account for these differences in his analysis. (See ¶¶ 33-37.)
 - In suggesting alternative funds with different risk characteristics from the Actively Managed Proprietary Funds, Dr. Pomerantz also fails to consider participants' preferences for the risk characteristics of the Actively Managed Proprietary Funds as compared to those of Dr. Pomerantz's chosen comparators. Dr. Pomerantz assumes, without any basis, that Plan participants would have accepted his comparators as suitable alternatives to the Actively Managed Proprietary Funds. In fact, Plan investment data show the contrary: that when some of Dr. Pomerantz's alternative funds were added to the Plan later in the Class Period, Plan participants remained invested in the available Actively Managed Proprietary Funds. (See ¶ 38.)
 - When expanding the set of alternative funds against which the performance of the Actively Managed Proprietary Funds is evaluated beyond Dr. Pomerantz's inappropriate single comparators, the performance of the Actively Managed Proprietary Funds was consistent with that of other mutual funds available to Plan fiduciaries in the marketplace. This includes the top five funds most frequently held by plan fiduciaries in each asset class based on Dr. Pomerantz's own analysis, and peers of the Actively Managed Proprietary Funds based on [Content omitted] analysis conducted by Lipper. (See ¶¶ 41-49.)

¹³ A gross return is the return that a portfolio or fund receives from all of its investment activities. A net return is the return that investors received from their investments in a portfolio or fund after deducting all fees and expenses associated with their investments.

¹⁴ A mutual fund prospectus is a legal document that the SEC requires each fund to make available to potential investors. Typically, the document identifies a market index (or blend of indices) that the fund puts forth to illustrate its investment approach. The performance of this "prospectus benchmark" may then serve as a comparator for the fund's performance. (Downes, J., and Goodman, J.E., *Dictionary of Finance and Investment Terms*, Eighth Edition, 2010, Barron's, DX173.0003-DX173.0004.)

- Dr. Pomerantz’s comparative fee-based analysis that he uses to ascertain that the proprietary and non-proprietary mutual funds in the Plan exhibited excessive fees during the Class Period is problematic in several ways.
 - Dr. Pomerantz’s focus on fees is inappropriate because investors and fiduciaries evaluate fees in the context of the services provided. Therefore, an analysis of a plan’s investment options and related fees requires a thorough study of the services provided in return for the fees. However, Dr. Pomerantz has not performed such a study. (See ¶¶ 52-54.)
 - Actively managed and passively managed funds are different investment products. Dr. Pomerantz fails to control for differences in the type and level of services offered across actively managed funds and passively managed funds in evaluating the expense ratios of actively managed funds relative to those of passively managed funds. (See ¶¶ 55-58.)
 - In evaluating the expense ratios of the mutual funds in the Plan relative to those of SMAs, Dr. Pomerantz fails to consider the differences in benefits offered by mutual funds compared to SMAs or CITs.¹⁵ (See ¶¶ 60-67.)
 - Dr. Pomerantz’s comparison of the expense ratios of the Actively Managed Proprietary Funds to those of his selected Vanguard index fund comparators is inappropriate as he has not accounted for the fact that actively managed and passively managed funds are different investment products, and as such, have different cost structures. (See ¶ 59.)
 - Dr. Pomerantz’s comparison of the expense ratios of the mutual funds in the Plan to Callan medians of expense ratios are flawed for several reasons.
 - Dr. Pomerantz claims that Plan fiduciaries failed to investigate the availability of SMA and CIT vehicles as lower-cost alternatives to the existing mutual funds in the Plan. However, Dr. Pomerantz testified that he has not investigated whether the investment advisers of the mutual funds in the Plan offered a CIT or SMA version of each mutual fund. His analysis is therefore based on a comparison of the fees of a hypothetical SMA or CIT with the fees of the mutual fund in the Plan. (See ¶ 69.)
 - Dr. Pomerantz’s comparisons of expense ratios of the Actively Managed Proprietary Funds to Callan medians, which are blended medians of actively and passively managed separate accounts, are misleading because such comparisons ignore the different cost structures of actively and passively managed funds (or separate accounts). The inclusion of passively managed separate accounts, which typically have lower expense ratios, makes it inappropriate to compare these broad averages to the expense ratios of the Actively Managed Proprietary Funds. (See ¶ 71.)

¹⁵ Dr. Pomerantz testified in deposition that he considers CITs and SMAs to be the same. (Deposition of Dr. Steve Pomerantz, December 13, 2017 (“Pomerantz Deposition”), p. 35.)

- The Callan categories used to control for expense ratios across asset types are overly broad and do not accurately reflect the investment strategies of some of the Plan investment options, which biases Dr. Pomerantz's findings. (*See* ¶ 72.)
- Dr. Pomerantz's comparison of the expense ratios of the mutual funds in the Plan to ICI averages suffers the same flaws inherent in his Callan comparison, namely the inclusion of passively managed mutual funds in the ICI averages and the fact that ICI asset categories are overly broad and do not accurately reflect the investment strategies of some of the Plan investment options. Furthermore, the ICI average expense ratio is an asset-weighted average that reflects what participants in the ICI-surveyed plans chose to invest in, rather than solely the expense ratios of investment options that ICI-surveyed plan fiduciaries made available in their plan investment lineups. (*See* ¶ 73.)
- Dr. Pomerantz fails to consider that the expense ratios of the proprietary mutual funds in the Plan were within the range of their respective Lipper peers, based on [Content omitted] analysis conducted by Lipper. This indicates that, contrary to Dr. Pomerantz's claim, the expense ratios of these funds were not excessive. (*See* ¶¶ 76-79.)
- Dr. Pomerantz has not shown that the Proprietary Index Funds had excessive fees or that they failed to accurately track their indices. He therefore has not demonstrated that their inclusion in the Plan was detrimental to Plan participants. Dr. Pomerantz's opinion that the Proprietary Index Funds were excessively expensive is based on his selection of and comparison to alternative funds that have the lowest fees. His analysis ignores that the expense ratios of the Proprietary Index Funds are at or near the median of expense ratios of their respective Lipper peers according to Lipper's [Content omitted] analysis. Furthermore, Dr. Pomerantz testified during his deposition that he does not have an opinion about whether an index fund with a tracking error relative to the actual index is an imprudent choice. His opinions on "tracking error" are therefore irrelevant as they are unsupported and are disconnected from any claims regarding fiduciary breaches. In addition, each Proprietary Index Fund had tracking error that typically was at or below the median tracking error of other index mutual funds that track the same index as the Proprietary Index Funds.¹⁶ (*See* ¶¶ 80-82.)
- [Content omitted]

¹⁶ Tracking error is a measure of risk that relates a mutual fund's returns to the performance of a benchmark. Tracking error is calculated as the standard deviation of the monthly difference between the returns of the fund and the benchmark.

III. The Plan

10. The Plan is a defined contribution 401(k) plan covering current and former employees of Deutsche Bank and its affiliates. Deutsche Bank Americas Holdings Corp. maintains the Plan.¹⁷

11. **Exhibit 1** contains an overview of the Plan during the Class Period. As displayed in this exhibit, total Plan assets increased from approximately \$1.9 billion as of year-end 2009 to approximately \$3.0 billion as of the first quarter of 2017. Over this period, the Plan had between 20,000 and 23,000 participants, including former employees and their beneficiaries. These former employees and their beneficiaries, who are generally eligible to roll their money out of the Plan, accounted for approximately 48 to 50 percent of Plan participants during the Class Period.

12. The Plan's investment options include mutual funds, CITs, and a stable value fund, as well as a self-directed brokerage window.¹⁸ The Plan also offers both proprietary and non-proprietary investment options and has throughout the Class Period. As shown in **Exhibit 1**, the number of investment options included in the Plan ranged from 16 to 22 during the Class Period, as the result

¹⁷ Deutsche Bank Matched Savings Plan, Form 5500, Financial Statements and Supplemental Schedule, "Notes to Financial Statements," December 31, 2015 and 2014, JX122.0195 and JX121.0142. Defined contribution plans, including 401(k) plans, are retirement plans typically provided by employers (or plan sponsors) that enable an employee (or participant) to contribute money to an individual account that the employee (or participant) controls. The plan sponsor may also contribute to the individual account, in some cases, by matching a certain percentage of a participant's contributions or making other contributions.

¹⁸ A self-directed brokerage window offers participants in a defined contribution plan additional investment options beyond the core investment options offered in the plan. Under the Plan, participants may invest up to 90 percent of their assets in the self-directed brokerage window. (*See, for example*, Hewitt, "Deutsche Bank Matched Savings Plan, Performance Review and Investment Manager Evaluation," Fourth Quarter 2009, JX149.0008.) A stable value fund is a capital preservation investment option available in some 401(k) plans and other types of savings plans. Stable value funds are often invested in a high quality, diversified fixed income portfolio that is protected against interest rate volatility by contracts from banks and insurance companies. Stable value funds are designed to preserve capital while providing steady, positive returns. (Stable Value Investment Association, "Stable Value FAQ," DX202.0004, available at https://stablevalue.org/media/misc/Stable_Value_FAQ.pdf.)

of additions and removals of investment options.¹⁹ **Exhibit 2** lists the investment options in the Plan and their invested assets at each year-end during the Class Period.

13. Throughout the Class Period, new hires to Deutsche Bank and its affiliates were automatically enrolled in the Plan, unless they actively elected not to participate.²⁰ Participants who did not make active asset allocation decisions were automatically invested in the Qualified Default Investment Alternative (“QDIA”). The QDIA for the Plan was never a proprietary fund during the Class Period: it was the Dodge & Cox Balanced Fund from the beginning of the Class Period until January 2014, when it was changed to the Vanguard Retirement Trust fund with the target date closest to when the employee becomes age 65.²¹

14. **Exhibit 3** shows a distribution of Plan participants by the number of investment options each of them held. These data show that participants on average invested in between two and five investment options, with approximately 38 to 46 percent of participants holding this many investment options throughout the Class Period. An additional 30 to 38 percent of participants held only one option. The average number of investments held remained relatively stable throughout the Class Period.

¹⁹ For the purpose of this declaration, I consider target-date funds in the same series as a single investment option.

²⁰ Deutsche Bank Matched Savings Plan, “Summary Plan Description,” effective January 1, 2009 (“2009 SPD”), DX139.0008; Deutsche Bank Matched Savings Plan, “Summary Plan Description,” effective January 1, 2014 (“2014 SPD”), JX195.0005.

²¹ 2009 SPD at DX139.0017; 2014 SPD at JX195.0009. A Qualified Default Investment Alternative (“QDIA”) is an investment option in DC plans in which, unless the plan participant elects otherwise, the participant’s contributions are placed by default. (U.S. Department of Labor, Employee Benefits Security Administration, “Fact Sheet: Default Investment Alternatives Under Participant-Directed Individual Account Plans,” September 2006, DX204, accessed at <https://www.dol.gov/agencies/ebsa/about-ebsa/our-activities/resource-center/fact-sheets/default-investment-alternatives-under-participant-directed-individual-account-plans>.)

IV. Dr. Pomerantz Fails to Establish that the Actively Managed Proprietary Funds are Inappropriate Core Investment Options for the Plan

A. Overview of Dr. Pomerantz's performance-based analyses

15. Plaintiffs allege that the inclusion of the Actively Managed Proprietary Funds was imprudent because they “had significantly higher fees than comparable funds and a track record of poor performance.”²²

16. Dr. Pomerantz opines that Plan fiduciaries included numerous poorly performing Actively Managed Proprietary Funds in the Plan that “a prudent and loyal fiduciary would not have retained.”²³ As part of this opinion, Dr. Pomerantz compares the net-of-fee returns of the Actively Managed Proprietary Funds to those of alternative mutual funds that he selected based on two methodologies (collectively, the “Pomerantz Models”).²⁴ Based on these two models, Dr. Pomerantz further purports to assess performance-based damages attributable to the inclusion of the Actively Managed Proprietary Funds.²⁵ [Content omitted] The two models differ with respect to the alternative funds used in the model (the “Pomerantz Benchmarks”). The Pomerantz Benchmarks are:

- **Model 1 – Vanguard Index Funds:**²⁶ The Vanguard index fund that is in the same Morningstar Category²⁷ as the Actively Managed Proprietary Fund, or a benchmark index

²² Complaint, ¶ 5.

²³ Pomerantz Report, p. 4, PX250.

²⁴ Pomerantz Report, p. 4, PX250.

²⁵ Pomerantz Report, pp. 4-5, PX250.

²⁶ For a discussion of how the characteristics of actively managed funds differ from passively managed (or index) funds, see **Section VI.B.1** below.

²⁷ A Morningstar category is assigned by Morningstar to a fund based on the underlying investments in the fund. Morningstar places funds in a given Morningstar category based on their portfolio statistics and compositions over the past three years. (Morningstar Investing Glossary, “Morningstar Category,” DX266, available at: http://www.morningstar.com/invGLOSSARY/morningstar_category.aspx.)

less an assumed fee for one Actively Managed Proprietary Fund for which a Vanguard index fund in the same Morningstar Category does not exist;²⁸ and

- **Model 2 – Most Popular Funds:** The fund within the same Morningstar category as each Actively Managed Proprietary Fund that was one of the top five most commonly used among fiduciaries of 401(k) plans with more than \$250 million in assets as of year-end 2009 and had the most assets invested in the fund by plans with more than \$250 million in assets.²⁹

17. [Content omitted]³⁰

18. During his deposition, Dr. Pomerantz testified that he does not have an opinion regarding the prudence of any of his alternative options in his Model 2.³¹

B. Dr. Pomerantz’s comparisons to alternative funds are insufficient to establish that the inclusion of the Actively Managed Proprietary Funds in the Plan was imprudent

19. As described above, Dr. Pomerantz developed his Model 1 and Model 2 to support his opinion that Plan fiduciaries “improperly gave a preference” to the Actively Managed Proprietary Funds “over other investments that would have better served the interests of the Plan’s participants.”³² In creating these models, Dr. Pomerantz assessed the Actively Managed Proprietary Funds relative to his chosen alternative funds based on historical performance of the funds over the Class Period. However, Dr. Pomerantz testified during his deposition that “historical performance is actually irrelevant” in deciding which investment options to include or retain in a retirement plan.³³ Thus, Dr. Pomerantz’s own testimony invalidates the very analysis

²⁸ Pomerantz Report, ¶ 87, PX250.

²⁹ Pomerantz Report, ¶¶ 90-91, PX250.

³⁰ [Content omitted]

³¹ Pomerantz Deposition, p. 44.

³² Pomerantz Report, p. 3, PX250.

³³ Pomerantz Deposition, pp. 162-164.

that he attempts to use with his Model 1 and Model 2 in ascertaining whether the inclusion of the Actively Managed Proprietary Funds in the Plan during the Class Period was imprudent. More specifically, Dr. Pomerantz's testimony contradicts the premise of his own analysis, namely that the Investment Committee should have analyzed performance [Content omitted] in order to determine whether to replace the Actively Managed Proprietary Funds [Content omitted].

20. Dr. Pomerantz also testified in his deposition that he is not opining that either of the alternative Plan line-ups in Model 1 or Model 2 would have been adopted by the Plan fiduciaries in lieu of the Actively Managed Proprietary Funds, or even that these alternative Plan line-ups were prudent. For Model 1, he testified that, "I'm not saying that the proprietary fund[s] at issue here would have been replaced with index funds."³⁴ In other words, he is not opining that his specific Model 1 comparators would have been, or should have been, substituted for the Actively Managed Proprietary Funds.³⁵ Regarding Model 2, Dr. Pomerantz testified during deposition that he does not opine as to the prudence or imprudence of his Model 2 options.³⁶ Given that Dr. Pomerantz specifically declined to opine on the prudence of his alternatives, his Model 1 and Model 2 comparisons provide no information about whether the inclusion of the Actively Managed Proprietary Funds represented a breach of fiduciary duty.

21. Moreover, Dr. Pomerantz testified at deposition that Plan fiduciaries should have replaced all proprietary funds in the Plan at the beginning of the Class Period. Dr. Pomerantz offers no

³⁴ Pomerantz Deposition, p. 53.

³⁵ As discussed in detail in paragraph 38 below, Dr. Pomerantz also does not consider the preferences of Plan participants, and therefore does not opine that participants who had invested in the Actively Managed Proprietary Funds would have chosen to invest in his comparators rather than in the other actively managed non-proprietary funds on the Plan menu.

³⁶ Pomerantz Deposition, p. 44.

analysis showing that a prudent fiduciary would—or, as a practical matter, could—have immediately removed all proprietary funds as of December 21, 2009. Indeed, Dr. Pomerantz implies the contrary in his report. According to Dr. Pomerantz, as of December 2009, Plan fiduciaries should have “conduct[ed] a thorough review of the proprietary investments that included a comparison to marketplace alternatives, as a prudent and loyal fiduciary would have done.”³⁷ In addition, even though Dr. Pomerantz testified that fiduciaries should have engaged in daily reevaluation of the Plan’s fund lineup, Dr. Pomerantz’s Models 1 and 2 both employ lineups of comparators that do not change after the beginning of the Class Period.³⁸

22. Specific to his Model 1, Dr. Pomerantz testified that his Model 1 comparison to an index fund “is a market-adjusted analysis of how an unconflicted choice would have performed.”³⁹ For such a comparison to be appropriate, Dr. Pomerantz would need to demonstrate that the Actively Managed Proprietary Funds and their respective Model 1 comparators tracked the same index. As shown in **Exhibit 4**, the prospectus benchmarks for six of the seven Actively Managed Proprietary Funds were different from the prospectus benchmarks of their Model 1 index fund comparators,⁴⁰ and these prospectus benchmarks had returns over the Class Period that differed. For example, Dr. Pomerantz compares the performance of the Deutsche Large Cap Value Fund to that of the Vanguard Value Index Fund. However, the prospectus benchmark of the Vanguard Value Index

³⁷ Pomerantz Report, p. 3, PX250.

³⁸ “[M]aybe they made an imprudent selection ten years prior to that point in time and then did nothing. But the way I think of things is every day is a new day. So every day you have the opportunity to erase a decision you made yesterday. Or affirmatively support the decision that you made yesterday. [...] If a prudent or imprudent decision was made in 2005, I have no opinion on that. [...] I think implicitly you affirm that statement every single day by either doing something or not doing something.” (Pomerantz Deposition, pp. 75-79.)

³⁹ Pomerantz Deposition, p. 53.

⁴⁰ For the seventh, Dr. Pomerantz did not identify a Vanguard comparator, and instead used the prospectus benchmark. (Pomerantz Report, p. 32 n. 113, PX250.)

Fund (the MSCI U.S. Prime Market Index and later the CRSP U.S. Large Cap Value Index⁴¹) had an annualized total return over the Class Period that exceeded the annualized total return of the prospectus benchmark of the Deutsche Large Cap Value Fund (the Russell 1000 Value Index) by 27 basis points. (See **Exhibit 4**.) This means that Dr. Pomerantz is not performing an “apples-to-apples” comparison, and therefore, some of the differences in performance that Dr. Pomerantz finds in his Model 1 comparison are the result of using an inappropriate comparator to evaluate the performance of the Actively Managed Proprietary Funds. Therefore, for this reason alone, his Model 1 is insufficient to demonstrate that the inclusion of the Actively Managed Proprietary Funds was imprudent.

23. Specific to his Model 2, Dr. Pomerantz testified during deposition that he does not opine as to the prudence or imprudence of his Model 2 options.⁴² He stated that the investment options used in his Model 2 represent the “collective wisdom or the collective decision-making of the DC community.”⁴³ A proper benchmarking analysis requires examination of the *Plaintiffs’ economic position* in this Plan, not the imposition of other investment committees’ choices for other Plans. Further, of particular relevance to Dr. Pomerantz’s method, such an analysis should evaluate the performance of the Actively Managed Proprietary Funds relative to but-for prudent investment options that fiduciaries free of the alleged misconduct in this case would have been likely to choose. He has not done so. In other words, if his Model 2 Pomerantz Benchmarks are *not* prudent investment options that a prudent fiduciary would have chosen, then the performance of these

⁴¹ In 2013, the prospectus benchmark for Vanguard Value Index Fund changed from MSCI US Prime Market Value Index to CRSP US Large Cap Value TR USD. See **Exhibit 4**.

⁴² Pomerantz Deposition, p. 44.

⁴³ Pomerantz Deposition, pp. 44-45.

funds is not appropriate to use in evaluating whether the performance of the Actively Managed Proprietary Funds was consistent with the performance of a prudent option.

24. In addition, it is impractical and unreasonable to use the Pomerantz Benchmarks underlying Dr. Pomerantz's Model 2 as a basis for evaluating the performance of the Actively Managed Proprietary Funds. Despite Dr. Pomerantz disclaiming an opinion as to the prudence of the Model 2 options, Dr. Pomerantz's Model 2 relies on a single comparator fund for each Actively Managed Proprietary Fund, and therefore is premised on the assumption that the fund in a given Morningstar category that is the most "popular" among other fiduciaries represents the only prudent alternative benchmark by which to evaluate the performance of the investment options in the Plan.⁴⁴ This assumption is unreasonable for several reasons.

25. First, Dr. Pomerantz distills the "collective wisdom" of the DC community to a single fund within each asset class. In reality, different fiduciaries choose different funds in the same asset class for their own plans. The fact that fiduciaries can and do select from a range of different funds in the same asset class is shown by Dr. Pomerantz's own analysis where he first identifies the top five funds most commonly used among fiduciaries of 401(k) plans in a given Morningstar category before narrowing his Model 2 options down to a single fund.⁴⁵ In other words, there is a wide range of potential funds in a given asset class from which plan fiduciaries can choose, and have chosen, when determining investment lineups for retirement plans. Each of the other possible funds in the same asset class has its own set of returns, and this range of returns represents what a

⁴⁴ I note that Dr. Pomerantz does not claim underperformance by the actively managed non-proprietary funds offered by the Plan. Many of the actively managed non-proprietary funds offered by the Plan do not appear among the top five most popular funds within a given Morningstar category identified by Dr. Pomerantz. (Pomerantz backup file, PX322.XLSX.) This is at odds with the premise implicit in Dr. Pomerantz's Model 2 that the most "popular" funds among other fiduciaries represent the only prudent investment options for the Plan.

⁴⁵ Pomerantz backup file, PX322.XLSX.

plan fiduciary can expect to achieve in selecting an investment option in that asset class for its retirement plan, not the individual set of returns of Dr. Pomerantz's single comparator.

26. Second, if accepted, Dr. Pomerantz's Model 2 would act to limit, and even eliminate, competition. That is, if only the most popular fund in any given category is a reasonable investment option and the only appropriate comparator to evaluate performance of an investment option, then all fiduciaries of defined contribution plans would face great pressure to switch to the most popular funds or risk lawsuits, regardless of whether a diligent selection process would have rendered the same selection. Were this to happen, defined contribution plans would differ only with respect to the number of categories they offered and every plan that included a particular category would offer the same fund, limiting any potential demand for competing funds and rendering any diligent investment selection process irrelevant.

27. Third, Dr. Pomerantz claims that his chosen Model 2 Pomerantz Benchmarks represent investment options selected from an "unconflicted process."⁴⁶ He does so notwithstanding the fact that he has not demonstrated that these investment options were selected from an "unconflicted process." Further, Dr. Pomerantz has not provided justification for the premise that his Model 2 Benchmarks are the *only* appropriate benchmarks rather than other unaffiliated funds held by retirement plans such as, for instance, the other five "most popular" unaffiliated investment options

⁴⁶ Pomerantz Deposition, p. 44.

held in retirement plans, or even the other actively managed non-proprietary funds offered in the Plan.^{47, 48}

28. In sum, Dr. Pomerantz's deposition testimony that historical performance is actually irrelevant in deciding which investment options to include or retain in a retirement plan contradicts the premise of his own performance-based analysis. Furthermore, the Pomerantz Benchmarks in Models 1 and 2 are inadequate for purposes of evaluating the appropriateness of the Actively Managed Proprietary Funds as investment options in the Plan.

C. Dr. Pomerantz fails to meet the basic standards of establishing the underperformance of the Actively Managed Proprietary Funds

29. Dr. Pomerantz's performance-based analysis of the Actively Managed Proprietary Funds includes additional false assumptions and flaws. First, Dr. Pomerantz's analysis suffers from hindsight bias—*i.e.*, it is premised on the faulty assumption that, at the beginning of the Class Period, the Investment Committee should have anticipated underperformance by the Actively Managed Proprietary Funds. Contrary to Dr. Pomerantz's assumption, however, the information available at the beginning of the Class Period did not warrant a prediction that the Actively Managed Proprietary Funds would perform poorly and thus did not warrant the removal of all Actively Managed Proprietary Funds at the beginning of the Class Period as suggested by

⁴⁷ Dr. Pomerantz's Model 2 is premised on the value of comparing the Actively Managed Proprietary Funds to mutual funds available in the marketplace. To select the Model 2 Pomerantz Benchmarks, Dr. Pomerantz first identifies, among fiduciaries of plans with more than \$250 million in assets, the top five most frequently held funds that have the same Morningstar category as each Actively Managed Proprietary Fund ("Top 5 Funds"). From those Top 5 Funds, Dr. Pomerantz then selects a single fund that had the most assets invested in it by plans with more than \$250 million in assets. (Pomerantz Report, ¶¶ 90-91, PX250.)

⁴⁸ I note that Plaintiffs' other expert, Ms. Marcia Wagner, testified at her deposition that a fiduciary should not "follow the pack" in investment selection and that just because a particular fund is chosen by other plan fiduciaries does not mean that such fund is necessarily prudent or imprudent for a particular plan. (Deposition of Marcia S. Wagner, Esq., December 15, 2017, pp. 243-244.)

Dr. Pomerantz. For instance, as shown in **Exhibit 5** (also in the table below), at the beginning of the Class Period, several of the Actively Managed Proprietary Funds had historical five-year returns that were greater than those of their respective Pomerantz Benchmarks, while other Actively Managed Proprietary Funds had less risky investment strategies as measured by lower standard deviation of historical returns relative to their respective benchmarks.⁴⁹

⁴⁹ Historical rolling returns are annualized average returns for a specified period (*e.g.*, 1-year, 3-year, 5-year, etc.). For example, a historical five-year return as of December 31, 2010 is the annualized average return from January 1, 2006 through December 31, 2010. These returns are useful for examining the behavior of returns for various holding periods. Standard deviation is a measure of dispersion of a set of data from its mean. When applied to the returns of an investment, it informs the historical volatility of that investment. The greater the standard deviation of returns of a security, the greater the variance between each return and the mean, indicating a larger return range and higher volatility. Thus, an investment with a lower standard deviation of returns can be perceived as being less volatile relative to its mean than one with higher standard deviation of returns.

Performance Statistics of Actively Managed Proprietary Funds and the Pomerantz Benchmarks					
<i>December 2009</i>					
	Assets Under Management (in millions)	Fee	Annualized 5-Year Statistics		
			Cumulative Return	Standard Deviation	Sharpe Ratio
Deutsche Capital Growth Fund	\$1,771	0.71%	2.33%	14%	-0.03
Model 1: Vanguard Growth Index Fund; Institutional	\$15,670	0.08%	1.79%	16%	-0.06
Model 2: Fidelity Contrafund	\$63,892	1.02%	4.75%	15%	0.13
Deutsche Core Fixed Income Fund	\$605	0.55%	0.78%	5%	-0.39
Model 1: Vanguard Total Bond Market Index Fund; Inst	\$67,871	0.07%	5.04%	4%	0.63
Model 2: PIMCO Total Return Fund; Institutional	\$201,742	0.45%	6.85%	4%	0.97
Deutsche CROCI International Fund	\$1,261	0.81%	3.15%	22%	0.02
Model 1: Vanguard Total International Stock Index Fund; Inst	\$26,044	0.27%	5.26%	21%	0.12
Model 2: Dodge & Cox International Stock Fund	\$36,748	0.65%	5.59%	23%	0.13
Deutsche Global Growth Fund ³	\$1,221	1.12%	36.40%	23%	1.55
Model 1: Vanguard Total World Stock Index Fund; Inst	\$757	0.25%	25.81%	25%	1.02
Model 2: American Funds New Perspective Fund; R5	\$43,835	0.52%	29.67%	22%	1.37
Deutsche High Income Fund	\$1,533	0.67%	4.93%	11%	0.21
Model 1: BofAML US HY Master II Constmd	-	-	6.40%	13%	0.28
Model 2: Fidelity Capital & Income Fund	\$11,493	0.78%	7.64%	14%	0.35
Deutsche Large Cap Value Instl	\$1,629	0.63%	1.66%	15%	-0.07
Model 1: Vanguard Value Index Fund; Institutional	\$11,641	0.08%	0.19%	17%	-0.15
Model 2: Dodge & Cox Stock Fund	\$39,991	0.52%	-0.69%	19%	-0.18
Deutsche Real Estate Sec Instl	\$973	0.63%	0.75%	32%	-0.06
Model 1: Vanguard REIT Index Fund; Institutional	\$11,280	0.09%	0.71%	32%	-0.06
Model 2: TIAA-CREF Real Estate Securities Fund; Inst	\$495	0.56%	-1.87%	31%	-0.15
Notes: [1] BofAML US HY Master II Constmd is an index and therefore does not have values for Assets Under Management or Fee. [2] "-" indicates missing data. [3] The Deutsche Global Growth Fund's and its alternatives' statistics are calculated only for the period from November 2008 to December 2009 as the Deutsche Global Growth Fund's first full month of data is September 2008 and the Vanguard Total World Stock Idx's first full month of data is November 2008. Sources: Lipper for Investment Management; Morningstar Direct; Pomerantz Report, PX250.					

30. Moreover, Dr. Pomerantz improperly fails to consider the value of the Actively Managed Proprietary Funds to Plan participants as compared to the value of the Pomerantz Benchmarks. Ignoring the relative costs as well as benefits of the Actively Managed Proprietary Funds compared to the available alternatives is tantamount to claiming that a product, such as a hotel room, is priced excessively simply because a cheaper (or more popular) alternative was available, without taking into account differences in the hotel's location, quality, and services. Indeed, Dr. Pomerantz considers nothing other than the Actively Managed Proprietary Funds' net-of-fee returns and ignores other attributes that may add value for Plan participants. For example, Dr. Pomerantz ignores that the Actively Managed Proprietary Funds offer benefits not offered by index funds

(which I describe in detail below in **Section VI.B.1**) and the role of the Actively Managed Proprietary Funds within Plan participants' broader portfolios (both inside and outside of the Plan). The absence of a cost-benefit analysis of the Actively Managed Proprietary Funds renders the Pomerantz Models incapable of evaluating the totality of the performance of the Actively Managed Proprietary Funds.

31. In sum, Dr. Pomerantz's performance-based analysis for the Actively Managed Proprietary Funds in the Plan has not demonstrated that any underperformance was expected and caused by the alleged breaches and does not consider other attributes of the Actively Managed Proprietary Funds that participants may value.

V. The Pomerantz Models and Many of the Pomerantz Benchmarks Are Unable to Support Dr. Pomerantz's Conclusions

32. In addition to the overarching flaws in Dr. Pomerantz's performance-based analysis, both of the Pomerantz Models, as well as the associated Pomerantz Benchmarks, suffer from additional flaws. Specifically, many of the Pomerantz Benchmarks have different characteristics from their respective Actively Managed Proprietary Funds, and Dr. Pomerantz has not determined how much of his calculated performance-based differences are attributable to these differences versus attributable to the alleged misconduct. In addition, Dr. Pomerantz's selection of a single Pomerantz Benchmark to evaluate the performance of each Actively Managed Proprietary Fund is unjustified because he has not established that his selection would be the *only* appropriate choice among all other possible funds in the same asset class.

A. Some Pomerantz Benchmarks have characteristics that are different than the investment options in the Plan that Dr. Pomerantz seeks to evaluate and has replaced

33. Even among mutual funds with similar investment objectives (*e.g.*, the same Morningstar Category), different investment managers have different approaches in managing their funds. Thus, even though Dr. Pomerantz selects each Pomerantz Benchmark so that it has the same Morningstar Category as the corresponding Actively Managed Proprietary Fund, some Pomerantz Benchmarks exhibit different risk characteristics than their respective Actively Managed Proprietary Fund, as shown by differences in prospectus benchmarks and asset allocations. Mutual funds with different prospectus benchmarks may pursue different investment strategies and have different risk profiles. Similarly, differences in asset allocation can reflect different risk characteristics. Funds with different risk characteristics, regardless of whether the funds were prudent investments, are *expected* to have different returns. Accordingly, without determining how much of the difference in returns between two funds is due to differences in their risk characteristics or in the absence of selecting a range of funds with a range of risk characteristics to use as comparators, it is inappropriate to assume that any difference in returns is indicative of or due solely to the alleged misconduct. Dr. Pomerantz has failed to control for these differences in fund characteristics in his performance-based analysis.

34. For instance, the Pomerantz Benchmarks for the Deutsche Global Growth Fund and the Deutsche Large Cap Value Fund have different prospectus benchmarks than these funds, indicating that the Pomerantz Benchmarks pursued a different investment strategy than these two Actively Managed Proprietary Funds. Specifically, the Deutsche Global Growth Fund has a primary prospectus benchmark of the MSCI World Index, which invests in large- and mid-cap

equity in 23 developed markets.⁵⁰ The Model 1 Pomerantz Benchmark for this fund has a prospectus benchmark of the FTSE Global All Cap (US RIC) Index, which represents the performance of large-, mid-, and small-cap equity stocks in both developed and emerging markets.⁵¹ For Model 2, the Pomerantz Benchmark for this fund has a prospectus benchmark of the MSCI ACWI Index, which represents the performance of large- and mid-cap equity in both developed and emerging markets.⁵² Similarly, the Deutsche Large Cap Value Fund has a different prospectus benchmark than either of Dr. Pomerantz's proposed alternatives. **Exhibit 4** shows the many differences between prospectus benchmarks for the Actively Managed Proprietary Funds and the Pomerantz Benchmarks.

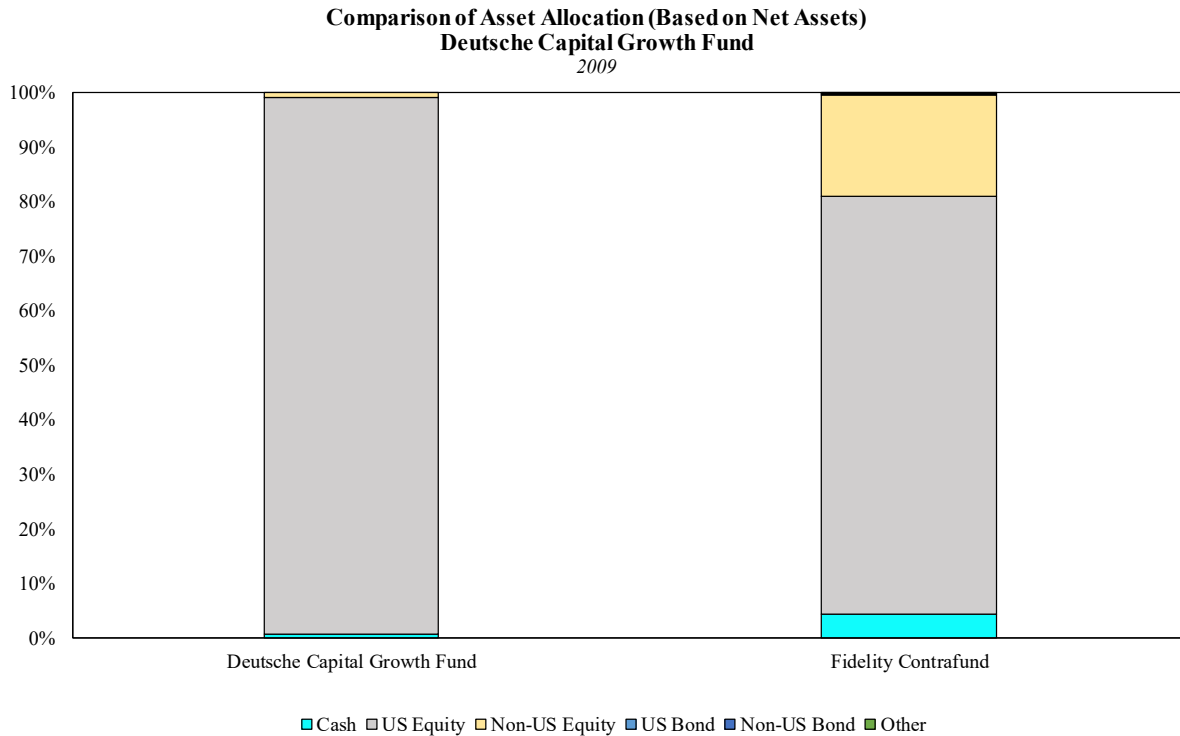
35. In addition, some Pomerantz Benchmarks have different asset allocations than their corresponding Actively Managed Proprietary Funds.⁵³ Differences in asset allocation can lead to differences in returns. For example, a fixed income mutual fund that is more heavily weighted towards high yield bonds is expected to have higher average returns over time than one that is more heavily weighted towards high rated bonds because the former is exposed to higher credit risk. In this case, for instance, the Deutsche Capital Growth Fund has a vastly different asset allocation than its Pomerantz Benchmark in Model 2, the Fidelity Contrafund. The chart below shows that, while the allocation to non-US equity of the Deutsche Capital Growth Fund was only 0.8 percent, the Fidelity Contrafund had a much higher allocation at 18.7 percent.

⁵⁰ See, for example, MSCI World Index Factsheet, DX249, accessed at <https://www.msci.com/documents/10199/178e6643-6ae6-47b9-82be-e1fc565ededb>.

⁵¹ See, for example, FTSE Global All Cap Index Factsheet, DX247, accessed at <http://www.ftse.com/Analytics/FactSheets/Home/DownloadSingleIssue/GAE?issueName=GEISLMS>.

⁵² See, for example, MSCI ACWI Index Factsheet, DX248, accessed at <https://www.msci.com/documents/10199/8d97d244-4685-4200-a24c-3e2942e3adeb>.

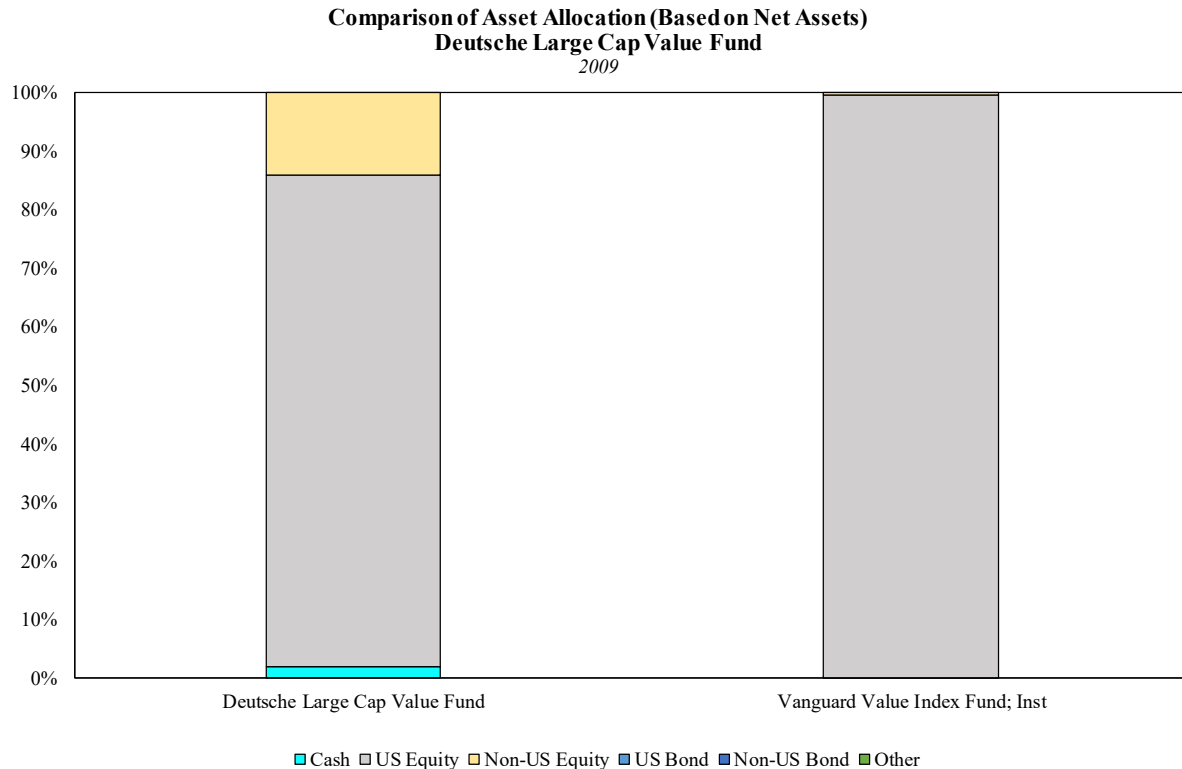
⁵³ **Appendix D** shows the sector allocations of the Actively Managed Proprietary Funds as well as those of the Pomerantz Benchmarks.

**Source:**

Morningstar Direct.

36. Similarly, Dr. Pomerantz uses the Vanguard Value Index Fund as his Model 1 alternative for the Deutsche Large Cap Value Fund even though the Vanguard Value Index Fund has a much lower asset allocation to non-U.S. equity of 0.3 percent (compared to 14.0 percent). (See below chart.)

37. Each of these differences in prospectus benchmark and asset allocation renders unreliable the comparison that Dr. Pomerantz makes between the net returns of the Actively Managed Funds and the Pomerantz Benchmarks.



Source:
 Morningstar Direct.

38. In suggesting alternative funds with different risk characteristics as the Actively Managed Proprietary Funds, Dr. Pomerantz also fails to consider participants' preferences for the different risk characteristics of the Actively Managed Proprietary Funds as compared to those of Dr. Pomerantz's chosen comparators. That is, Dr. Pomerantz simply assumes, without any basis, that Plan participants would have accepted the Pomerantz Benchmarks as suitable alternatives to the Actively Managed Proprietary Funds. This assumption is speculative, and, in fact, Plan investment data show the contrary. Specifically, Actively Managed Proprietary Funds represented approximately one-third of Plan assets and available core investment options during the Class Period. Even though participant investment decisions revealed this preference, Dr. Pomerantz ignores such evidence by, for example, focusing *only* on using net returns of index funds as benchmarks to evaluate the performance of the Actively Managed Funds in his Model 1. For

example, Dr. Pomerantz proposes the Vanguard Total Bond Market Index Fund as an alternative fund to the Deutsche Core Fixed Income Fund. The Vanguard Total Bond Market Index Fund was in fact added to the Plan beginning in 2013. That is, beginning in 2013, this fund was already available to Plan participants, who could have chosen to invest in this fund in lieu of the Deutsche Core Fixed Income Fund if they considered it a reasonable alternative. Instead, even once the Vanguard Total Bond Market Index Fund was introduced as an option, the level of Plan assets in the Deutsche Core Fixed Income Fund remained relatively constant at \$57 to \$61 million, suggesting that Plan participants did not elect to switch to Dr. Pomerantz's proposed alternative.⁵⁴

39. Furthermore, Dr. Pomerantz testified in his deposition that Deutsche Bank's Termination Review criteria are "bona fide criteria" and that a fund should have been removed as soon as it qualified for termination review.⁵⁵ However, Dr. Pomerantz has not performed an analysis to determine if the Pomerantz Benchmarks would have qualified to be included on the Termination Review lists.⁵⁶ In fact, many of the Pomerantz Benchmarks—which Dr. Pomerantz claims are reasonable alternative investments—would be considered imprudent under Dr. Pomerantz's own logic. For instance, while Dr. Pomerantz claims that the Deutsche Large Cap Value Fund was an imprudent investment because it would have appeared on the Special Review and Termination Review lists for several quarters,⁵⁷ the Dodge & Cox Stock Fund, which Dr. Pomerantz proposes

⁵⁴ In addition, Dr. Pomerantz's but-for investment lineup in Model 2 proposes an alternative fund, the Dodge & Cox International Stock Fund, that was already offered within the Plan throughout the Class Period. That is, this fund was already available to Plan participants, who could have chosen to invest in this fund in lieu of the Deutsche CROCI International Fund if they considered it a reasonable alternative. (See **Exhibit 2a.**)

⁵⁵ Pomerantz Deposition, pp. 118-119.

⁵⁶ Pomerantz Deposition, pp. 133-135.

⁵⁷ Pomerantz Report, ¶¶ 108-110, PX250.

as an alternative to the Deutsche Large Cap Value Fund, would have appeared on the Termination Review list for three quarters from 3Q 2010 through 1Q 2011. (See **Exhibit 6**.)

40. Thus, by his own criterion—qualified for Termination Review—several of the Pomerantz Benchmarks should be removed from consideration.

B. When expanding the set of alternative funds against which the performance of the Actively Managed Proprietary Funds is evaluated beyond Dr. Pomerantz's inappropriate single comparators, the performance of the Actively Managed Proprietary Funds was consistent with that of other mutual funds available to Plan fiduciaries in the marketplace

41. While there are characteristics other than performance that plan fiduciaries should consider when evaluating a mutual fund, Dr. Pomerantz chooses to focus on performance in claiming that the Actively Managed Proprietary Funds should have been removed from the Plan at the beginning of the Class Period. The Pomerantz Models, however, use a flawed approach to evaluating the performance of the Actively Managed Proprietary Funds by using a single alternative fund for each Actively Managed Proprietary Fund. Yet, Dr. Pomerantz has not established that each of these alternatives would be the only appropriate choice among all other possible funds in the same asset class. In fact, in developing his two different models, Dr. Pomerantz implies that he believes there can be multiple reasonable alternatives for each Actively Managed Proprietary Fund, with each alternative associated with a distribution of returns.⁵⁸ Given multiple reasonable alternatives, an appropriate performance comparative analysis should compare the returns of the Actively

⁵⁸ Moreover, Dr. Pomerantz does not attempt to reconcile or explain the differences in results across his models. For example, for the Deutsche Capital Growth Fund, his Model 1 comparator generally outperformed the Deutsche Capital Growth Fund over the Class Period, while his Model 2 comparator *underperformed* the Deutsche Capital Growth Fund over the Class Period. (Pomerantz Report, pp. 36-37, PX250.)

Managed Proprietary Funds to the distribution of returns achieved by the range of comparable options. Dr. Pomerantz does not perform such a comparison.

42. Dr. Pomerantz's Model 2 is premised on the comparison of the performance of the Actively Managed Proprietary Funds to mutual funds available in the marketplace. To select the Model 2 Pomerantz Benchmarks, Dr. Pomerantz first identifies, among fiduciaries of plans with more than \$250 million in assets, the top five most frequently held funds that have the same Morningstar category as each Actively Managed Proprietary Fund ("Top 5 Funds"). From those Top 5 Funds, Dr. Pomerantz then selects a single fund that had the most assets invested in it by plans with more than \$250 million in assets.⁵⁹ Dr. Pomerantz contends that this approach creates a plan investment lineup that "replicate[s] the investment decisions that other fiduciaries of similar retirement plans were making around the same time;" therefore, its performance reflects "how the Plan would have performed in the hands of a prudent fiduciary."⁶⁰ Even though Dr. Pomerantz selects from a range of possible alternatives, he nonetheless improperly bases his analysis on a single alternative fund.

43. Notwithstanding the flaws in the Pomerantz Models, it is instructive to adapt the Pomerantz Models to account for a range of possible comparable alternatives by comparing the returns of each Actively Managed Proprietary Fund to the distribution of returns for the comparable Top 5 Funds identified by Dr. Pomerantz. In other words, if one believes Dr. Pomerantz's logic that the fund selections made by other plan fiduciaries represent appropriate benchmarks to evaluate the performance of the Actively Managed Proprietary Funds in the absence of the alleged misconduct, then one should consider all of these Top 5 Funds, rather than the single comparator chosen by Dr.

⁵⁹ Pomerantz Report, ¶¶ 90-91, PX250.

⁶⁰ Pomerantz Report, ¶ 89, PX250.

Pomerantz. As shown in **Exhibit 7** (also in table below), over the Class Period, four of the seven Actively Managed Proprietary Funds had returns that fell within the range observed for the Top 5 Funds identified by Dr. Pomerantz.

Comparison of Cumulative Annualized Returns for Actively Managed Proprietary Funds to the Top 5 Most Frequently Held Funds in the Same Morningstar Category As Identified by Dr. Pomerantz <i>January 2010 - September 2017</i>				
Cumulative Annualized Return				
Actively Managed Proprietary Fund	Actively Managed Proprietary Option	Minimum Alternative Return	Maximum Alternative Return	Return within or above Alternative Return Range
Deutsche Capital Growth Fund	11.8%	10.4%	14.7%	X
Deutsche Core Fixed Income Fund	4.2%	3.6%	4.4%	X
Deutsche CROCI International Fund	3.5%	8.9%	14.7%	
Deutsche Global Growth Fund	5.4%	7.3%	9.3%	
Deutsche High Income Fund	7.7%	6.6%	8.4%	X
Deutsche Large Cap Value Instl	8.6%	9.7%	12.3%	
Deutsche Real Estate Sec Instl	12.6%	10.2%	13.0%	X
Number of Actively Managed Proprietary Funds Included in Dr. Pomerantz's Analysis				7
Number of Actively Managed Proprietary Fund Returns Greater than At Least One of the Top 5 Alternatives				4
<i>Percent</i>				<i>57%</i>
Notes: [1] The time period during the class period from December 21, 2009 through December 31, 2009 is excluded from this analysis. [2] In his selection of Pomerantz Benchmarks for Model 2, Dr. Pomerantz states that he first identifies the Top 5 most frequently held funds by plans with greater than \$250M in assets. Sources: Deutsche Bank Matched Savings Plan Participant Account Balance Data, PX057; Morningstar Direct; Pomerantz Report, PX250; Dr. Pomerantz's Backup File (PX322.XLSX); Fidelity Trial Balance DB MSP January 1, 2017 to January 31, 2017, DX142.0003; 2017-04 Trial Balance, JX138.0003; Deutsche Bank Matched Savings Plan Quarterly Investment Review, Third Quarter 2016, JX187.				

44. Moreover, [Content omitted] Section 15(c) of the Investment Company Act mandates that a mutual fund's independent directors or trustees must annually review and approve the advisory contract between the fund and its investment adviser, including the advisory fees. As part of this process, the Board of Directors or Trustees must request and evaluate, and the fund's adviser must furnish, information that may be reasonably necessary for the directors or trustees to assess the terms of a fund's advisory agreement, including an evaluation of fees and performance of the mutual fund relative to its peers.⁶¹ This process is known as the "15(c) process," named after the

⁶¹ See, for example, Independent Directors Council, "Advisory Contract Renewal," DX199, available at: http://fundamentals.idc.org/oversight/oversight_advisory.

section of the Investment Company Act that requires a majority of a fund's independent directors or trustees to approve the fund's advisory contract annually at an in-person meeting called for that purpose.⁶²

45. As part of the 15(c) process, a mutual fund's Board of Directors or Trustees requests information from the funds' adviser. The fund's adviser then responds with the requested information, some of which is provided by third-party consultants like Lipper.⁶³ [Content omitted]⁶⁴

46. [Content omitted]⁶⁵ [Content omitted]⁶⁶

47. Lipper's performance analysis included in the 15(c) materials shows that more than half of the Actively Managed Proprietary Funds had historical long-term performance that was above the median of that of their respective peer groups at the beginning of the Class Period, when Dr. Pomerantz testified that each of these Actively Managed Proprietary Funds should have been removed from the Plan.⁶⁷ Specifically, the 15(c) materials reflecting investment performance through year-end 2009 show that, for the share classes disclosed in the 15(c) materials, the five-year returns for four of the seven Actively Managed Proprietary Funds were above the median of their Lipper peer groups, with two additional funds just below the median with five-year returns

⁶² See Investment Company Act of 1940, USC Sec. 80a-10, DX200.

⁶³ See, for example, Independent Directors Council, "Advisory Contract Renewal," DX199, available at: http://fundamentals.idc.org/oversight/oversight_advisory.

⁶⁴ [Content omitted]

⁶⁵ [Content omitted]

⁶⁶ [Content omitted]

⁶⁷ Pomerantz Deposition, pp. 77-79.

higher than 49 and 47 percent of their Lipper peer groups (*see* [Content omitted] DWS Funds Board Annual Contract Review 2010, Performance Book III, DX153).

48. The seventh fund, the DWS Core Fixed Income Fund, had five-year returns in the fourth quartile of its peer group.⁶⁸ However, much of this underperformance is attributable to the performance of the fund when it was under the management of its former sub-adviser, Aberdeen Asset Management, up until approximately one year prior to the Class Period. Aberdeen Asset Management was terminated as sub-adviser of the Deutsche Core Fixed Income Fund due to performance issues and DB Advisors assumed control at the end of February 2009. The Fund has performed well since DB Advisors assumed control.⁶⁹ [Content omitted]

[Content omitted]

49. In sum, by using a single alternative fund for each Actively Managed Proprietary Fund in each of his models, Dr. Pomerantz has failed to consider the performance of the Actively Managed Proprietary Funds relative to their respective peer groups. If one broadens the set of potential alternatives beyond Dr. Pomerantz's single fund, it becomes apparent that the Actively Managed Proprietary Funds' performance was close to, or above, the median of those potential alternatives, or in one case, improved by the Board's choice to move portfolio management to DB Advisors from a sub-adviser. Thus, Dr. Pomerantz has ignored evidence that the Plan fiduciaries' choices were reasonable, and therefore appropriate. Further, Dr. Pomerantz has not shown that the selection of the Actively Managed Proprietary Funds was imprudent.

⁶⁸ DWS Funds Board Annual Contract Review 2010, Performance Book III, DX153.0017.

⁶⁹ Deutsche Bank Investment Committee Meeting Minutes, February 8, 2010, JX047.0002. A sub-adviser is a company employed by a mutual fund's adviser to assist with the management of a given mutual fund. (Morningstar Investing Glossary, "Subadvisor," DX201, accessed at <http://www.morningstar.com/InvGlossary/subadvisor.aspx>.)

VI. Contrary to Dr. Pomerantz's Claims, Participants in the Plan Did Not Pay Excessive Investment Management Fees

A. Overview of Dr. Pomerantz's Claims of Fiduciary Breaches Based on Supposedly Excessive Investment Management Fees

50. Dr. Pomerantz opines that Defendants “fail[ed] to investigate lower-cost alternatives to the Plan’s investments and ... fail[ed] to remove excessively-costly investments from the Plan.”⁷⁰

Dr. Pomerantz attempts to demonstrate these alleged failures to manage the plan in a “cost-conscious manner” through a fee-based analysis that evaluates the expense ratios of the proprietary and non-proprietary mutual funds in the Plan using three different benchmarks, which I collectively refer to as the “Pomerantz Fee Benchmarks”:⁷¹

- Callan: Callan is an independent third-party company that, like Lipper, provides information to funds’ boards or trustees. It periodically sends an electronic questionnaire seeking information on institutional investment management fees. Based on the responses Callan receives, Callan calculates the median actual expense ratios paid for separately managed account products by broad asset classes as reported by the fund sponsor respondents to the questionnaire.⁷² Dr. Pomerantz assigns a Callan broad category to each of the Plan’s proprietary mutual funds and compares the actual expense ratio of the proprietary mutual fund to the median expense ratio reported by Callan for the broad category, plus ten basis points for actively managed funds and seven basis points for passively managed funds to account for recordkeeping and administrative costs. Dr. Pomerantz also performs the same “Callan” comparison for the non-proprietary mutual funds in the Plan.
- Vanguard: For each of the Plan’s proprietary mutual funds, Dr. Pomerantz compares the expense ratio of the investment option to the expense ratio of a comparable Vanguard index mutual fund that is in the same Morningstar category as the Plan proprietary

⁷⁰ Pomerantz Report, ¶ 9, PX250.

⁷¹ Pomerantz Report, pp. 53-58, PX250.

⁷² Callan Investments Institute, “2014 Investment Management Fee Survey: U.S. Institutional Fund Sponsors and Investment Managers,” 2014, DX177.0004, DX177.0006-DX177.0007, DX177.0010. These broad asset classes include U.S. Equity, Non-U.S./Global Equity, Fixed Income, and Alternatives; and the reported median expense ratio of each broad asset class reflects the reported expense ratios of both actively managed and passively managed separate accounts.

investment option, plus seven basis points to account for recordkeeping and administrative costs.⁷³

- ICI: For each of the Plan's proprietary mutual funds, Dr. Pomerantz compares the expense ratio of the investment option to the average expense ratio, reported by the Investment Company Institute ("ICI"), of actively managed and passively managed mutual funds in the same broad asset category as the Plan proprietary investment options paid by other 401(k) plans that are similar size in terms of assets.

51. For the proprietary mutual funds in the Plan, Dr. Pomerantz concludes the funds were excessively costly using both the Vanguard and Callan benchmarks. For the non-proprietary mutual funds, Dr. Pomerantz bases his findings of fiduciary breach on a comparison to the Callan benchmarks only.

B. Dr. Pomerantz's focus on the investment management fees of the options in the Plan is inappropriate because investors and fiduciaries evaluate investment management fees in the context of the services provided

52. Dr. Pomerantz claims that the investment options in the Plan were associated with "excess expenses" and, as such, the Plan fiduciaries failed to control costs.⁷⁴ Dr. Pomerantz's claim implies that only investment management fees are relevant to a prudent plan fiduciary when evaluating investment options. However, investment management fees are the only relevant factor in the rare case when services and other characteristics are identical. Rather than reduce the choice between investment options to a comparison of fees, a fiduciary's analysis of a plan's investment options and related fees must also consider the value that investors place upon services provided in return for the investment management fee.

⁷³ The backup materials to the Pomerantz Report indicate that he added 7 bps to the expense ratio of the Vanguard index funds. See cells W:28 and B:75 through AF:84 on "ANALYSIS" tab of Pomerantz Report backup file PX334.XLSX. This was not reported in his expert report in this matter. During his deposition, Dr. Pomerantz testified that he added 10 basis points or "[w]hatever the revenue share that was being paid." Pomerantz Deposition, p. 174.

⁷⁴ Pomerantz Report, ¶¶ 128-29, 135, PX250.

53. Depending on their investment objectives, investors weigh the particular services and attributes associated with a mutual fund against its total fee. Mutual funds provide investors with a bundle of various services, including portfolio management, fund share transfers, exchanges, and redemptions, distribution networks, and marketing, legal, and auditing services.⁷⁵ Thus, mutual funds differ on many dimensions, and as the U.S. Department of Labor (“DOL”) has stated, “[f]ees are just one of several factors fiduciaries need to consider in deciding on service providers and plan investments.”⁷⁶ According to the DOL, participants should “[c]onsider fees as one of several factors in [their] decision making” and “[r]ealize that cheaper is not necessarily better.”⁷⁷ For example, industry research suggests that fund performance is also an important factor for investor decision making: the General Accounting Office states that “mutual fund advisers seek to differentiate their offerings primarily by promoting their funds’ returns and their fund families’ services.”⁷⁸

⁷⁵ Hubbard, R. G., et al., *The Mutual Fund Industry: Competition and Investor Welfare*, 2010, Columbia Business School, DX174.0004.

⁷⁶ U.S. Department of Labor, Employee Benefits Security Administration, “Meeting Your Fiduciary Responsibilities,” February 2012, PX324.0008, accessed at <https://www.dol.gov/sites/default/files/ebsa/about-ebsa/our-activities/resource-center/publications/meeting-your-fiduciary-responsibilities.pdf>.

⁷⁷ U.S. Department of Labor, Employee Benefits Security Administration, “A Look at 401(k) Plan Fees,” DX203.0005, accessed at <https://www.dol.gov/sites/default/files/ebsa/about-ebsa/our-activities/resource-center/publications/a-look-at-401k-plan-fees.pdf>.

⁷⁸ United States General Accounting Office, “Mutual Fund Fees,” 2000, DX169.0064. Many academic studies demonstrate that performance is an important factor for investors when selecting mutual funds. For example, Capon, Fitzsimons, and Prince (2007) find that “performance-related variables were both the most important information sources and selection criteria” for mutual fund investors. They determine that other factors, such as fund manager reputation, were also important, while fund management expenses were less relevant. Sirri and Tufano (1998) find that past performance is a significant indicator of fund flows even after controlling for total fees. Khorana and Servaes (2004) find that a performance improvement from the 25th to the 75th percentile results in an increase in fund family market share of 17 percent. (Capon, N., et al., “An Individual Level Analysis of Mutual Fund Investment Decision,” *Journal of Financial Services Research*, 1996, DX168.0010; Sirri, E. and Tufano, P., “Costly Search and Mutual Fund Flows,” *The Journal of Finance*, 53(5), 1998, JX139.0011-JX139.0012; Khorana, A., and Servaes, H., “Conflicts of Interest and Competition in the Mutual Fund Industry,” *Social Science Research Network*, July 2004, DX188.0022.)

54. When selecting plan options, fiduciaries should also consider the fund's investment strategy, expected distribution of future fund returns, the qualifications of the portfolio management staff, the nature and quality of support services provided by the investment management company (to the fund manager and/or to the plan), and the fit of the fund within the broader context of the available plan options. Dr. Pomerantz's analysis fails to take into account any of these characteristics and, thus, is incomplete and does not allow for a proper "apples-to-apples" comparison. For instance, as I will discuss in the sub-sections below, Dr. Pomerantz's fee-based analysis compares only the fee differential between actively managed and passively managed funds but fails to account for the differences in level of services associated with actively managed and passively managed funds. Similarly, Dr. Pomerantz's fee-based analysis only considers the differences in fees between mutual funds and SMAs but fails to consider the differences in the benefits offered by mutual funds as compared to SMAs.⁷⁹ Therefore, Dr. Pomerantz's fee-based analysis does not measure the difference between the economic value Plaintiffs would have received had the alleged misconduct not occurred and the economic value Plaintiffs have received given the alleged misconduct. Dr. Pomerantz's investment management fee comparisons thus are insufficient to demonstrate that the Plan fiduciaries failed to manage the Plan in a cost-conscious manner.

⁷⁹ Dr. Pomerantz claims that he is evaluating an alleged "failure to investigate separate accounts and CITs," but his Pomerantz Fee Benchmarks do not include any information regarding fees for CITs. *See, for example*, Pomerantz Report, ¶¶ 134, 140, PX250.

1. *Dr. Pomerantz's comparison of the expense ratios of the Actively Managed Proprietary Funds to those of the passively managed Vanguard funds is inappropriate because actively managed and passively managed funds are different investment products with different cost structures*

55. To support his opinion that the Plan's investments were excessively costly, Dr. Pomerantz compares the expense ratios of the Actively Managed Proprietary Funds to those of his Vanguard Fee Benchmarks, which consist of passively managed index funds. This fee comparison is inappropriate because Dr. Pomerantz does not control for differences in the type and level of services offered across actively managed funds and passively managed funds. In fact, Dr. Pomerantz does not show (or even contend) that active management in and of itself is imprudent.⁸⁰ This means that, under the valid supposition that the Plan fiduciary sought to include actively managed options in the Plan, the passively managed options Dr. Pomerantz chooses instead are not realistic choices for the Plan fiduciary.

56. Passively managed funds, such as the Vanguard funds Dr. Pomerantz uses, typically purchase all or a representative sample of a given index in order to track the performance of that index. In contrast, actively managed funds, such as the Actively Managed Proprietary Funds in question, attempt to outperform a specified benchmark or peer group. To accomplish this objective, actively managed funds rely on the experience of portfolio managers, market forecasting models, and research to select investments in order to time the market and/or adjust exposure to specific sectors or securities pursuant to the funds' investment mandates. In doing so, actively managed funds allow investors to select from a wider variety of investment strategies, which

⁸⁰ Pomerantz Report, ¶ 86, PX250.

provide exposure to a wider variety of risks.⁸¹ Therefore, by investing in actively managed funds, investors not only have a chance of earning returns in excess of the funds' benchmark indices, but also can gain exposure to particular risk attributes with particular return characteristics, which would not be available to them if they invested solely in index funds.⁸² As stated by SEC Chairman Jay Clayton, "Index investing has been great for me, but my best returning investments were actively managed funds. [...] So from personal experience, I certainly would not want to get rid of those."⁸³

57. Moreover, actively managed funds provide investors with a greater ability to reduce downside risk than do passively managed funds, including the ability to avoid extreme negative returns. Empirical research has shown that investors have an aversion to extreme negative returns and, if offered two investment options with the same expected return and same variance of returns, prefer to invest in the option that has a lower likelihood of extreme negative returns.⁸⁴ The table below provides a comparison of characteristics of actively managed and passively managed funds.

⁸¹ This is because the risk exposures of index funds are constrained to mirror those of market indices. In contrast, actively-managed funds are not constrained to strictly mimic an index and thus, generally have more latitude and discretion to increase or decrease the exposure of the fund to a certain asset type, market sector, or geographic region allowed under the fund's investment mandates. For instance, active management allows investors to have a greater exposure to growth and value investing strategies. (Sorensen, E. H. and Fabozzi, F. J., "Growth and Value Investing—Keeping in Style," *Handbook of Finance*, 2007, DX171.)

⁸² This conclusion is also supported by Pastor and Stambaugh (2002), which shows that even if there is not superior stock-picking ability among active fund managers, investors may still benefit from holding actively-managed funds. (Pastor, L., and Stambaugh, R.F., "Investing in Equity Mutual Funds," *Journal of Financial Economics*, 63(3), 2002, DX170.0018.) Research by Baks et al. (2001) also found that even investors "with weak prior beliefs in the possibility of [fund managers'] skill would still choose to invest some of [their] portfolio in active managers," which could "imply economically large investment in active management." (Baks, K.P., et al., "Should Investors Avoid All Actively Managed Mutual Funds? A Study in Bayesian Performance Evaluation," *Journal of Finance*, LVI (1), February 2001, DX184.0023, DX184.0029.)

⁸³ Michaels, D., "SEC Chairman Puts in a Good Word for Active Investing," *The Wall Street Journal*, July 26, 2017, DX195, accessed at <https://www.wsj.com/articles/sec-chairman-puts-in-a-good-word-for-active-investing-1501086299?mod=e2tw>.

⁸⁴ The incidence of extreme returns for a particular investment may be measured by the returns' skewness. An investment with returns exhibiting a positive skew has a larger likelihood of achieving modest positive returns and a smaller likelihood of achieving extreme negative returns (relative to an investment with returns exhibiting no

Characteristics of Actively Managed vs. Passively Managed Funds		
Investment Management		
Characteristic	Actively Managed Funds	Passively Managed Funds
Objective	Attempt to outperform a specified benchmark or peer group.	Track the performance of a given index.
Strategy	Rely on portfolio managers, forecasting models, and research to select investments.	Purchase all components or a representative sample of the given index.
Investment Management Fees	Typically charge higher investment management fees due to active involvement of investment manager.	Typically charge lower investment management fees due to limited/passive involvement of investment manager.
Investment Exposure		
Characteristic	Actively Managed Funds	Passively Managed Funds
Variety of Exposure	Provide exposure to a wide variety of risks.	Provide exposure to the risks inherent in the securities and composition of a given index.
Ability to Adjust Exposure	Generally have more latitude and discretion to adjust the fund's exposure to a certain asset type, market sector, or geographic region.	Are constrained to mirror the risk exposure of the given index.
Downside Risk Exposure	Provide ability to reduce downside risk and avoid extreme negative returns.	Face risks inherent with the given index.

58. Given the differences in investment approach, it is expected that the expense ratios would be different between these two types of funds and thus, passively managed funds should not be chosen as comparators for actively managed funds without controlling for the different type and level of services offered in exchange for their respective fees. As noted above in **Section IV.C**, Dr. Pomerantz ignores the relative costs and benefits of the Actively Managed Proprietary Funds compared to the available alternatives, including that the Actively Managed Proprietary Funds

particular skew). Actively managed mutual funds can select investments with positive skewness to help investors avoid extreme negative returns. (Arditti, F.D., "Another look at mutual fund performance," *Journal of Financial and Quantitative Analysis*, 6(3), 1971, DX165; Kraus, A. and Litzenberger, R., "Skewness Preference and the Valuation of Risk Assets," *The Journal of Finance*, 31(4), 1976, DX166; and Scott, R.C. and Horvath, P.A., "On the Direction of Preference for Moments of Higher Order than the Variance," *The Journal of Finance*, 35(4), 1980, DX167.)

offer benefits not offered by index funds and the role of the Actively Managed Proprietary Funds within Plan participants' broader portfolios (both inside and outside of the Plan).

59. Dr. Pomerantz's comparison of the expense ratios of the Actively Managed Proprietary Funds to those of his Vanguard Fee Benchmarks ignores these fundamental differences between actively managed funds and passively managed funds. Further, Vanguard operates its index funds at close to cost,⁸⁵ rendering it even more inappropriate to compare the expense ratios of Vanguard index funds to those of actively managed mutual funds operated by a for-profit entity, such as the Actively Managed Proprietary and Proprietary Index Funds, with an entirely different cost structure. As such, Dr. Pomerantz's comparison to the Vanguard Fee Benchmarks is insufficient to show that Actively Managed Proprietary and Proprietary Index Funds were excessively costly or should have been removed from the Plan earlier.

2. *Dr. Pomerantz's claim that Plan fiduciaries should have used SMAs or CITs fails to establish that comparable SMAs or CITs were available or to consider the differences in the benefits offered by mutual funds as compared to SMAs or CITs*

60. Dr. Pomerantz asserts that Plan fiduciaries should have considered replacing investment options in the Plan with SMAs or CITs, which would have been a lower cost "economic alternative" to mutual funds.⁸⁶ However, by focusing solely on a comparison of fees, Dr. Pomerantz fails to consider important differences in the benefits offered by mutual funds as compared to SMAs or CITs.⁸⁷

⁸⁵ Vanguard Group, "Why ownership matters," DX206, accessed at <https://about.vanguard.com/what-sets-vanguard-apart/why-ownership-matters/>.

⁸⁶ Pomerantz Report, ¶ 133, PX250.

⁸⁷ I note that Dr. Pomerantz testified that mutual funds and CITs/SMAs are structurally different in that CITs/SMAs do not usually pay revenue sharing. (Pomerantz Deposition, pp. 65-66.)

61. While mutual funds, CITs, and SMAs all allow for pooling of smaller amounts of money into a larger investment pool, making diversification and professional investment management more affordable, there are several key differences in the nature of services provided by each type of vehicle. Among these are the differences in regulation and differences in the availability of information.

62. Unlike mutual funds, which are regulated under the Investment Company Act of 1940, separate accounts and collective trusts are regulated by the Office of the Comptroller of Currency. Mutual funds therefore have different requirements from SMAs and CITs. For example, unlike mutual funds, SMAs and CITs are not required to have a board of directors (or trustees) of which at least 50 percent must be independent.⁸⁸

63. Similarly, the required disclosures for SMAs and CITs, as compared to those required for mutual funds, are different in their form, nature, or frequency. As one example, mutual funds must provide prospectuses (which contain information about investment objectives, investment strategies, risks, performance, corporate governance, fees, and more) to its investors, including participants in 401(k) plans. Mutual funds must also file with the U.S. Securities and Exchange Commission (“SEC”) on an annual basis Statements of Additional Information, which contain extensive information on the history of the fund, officers and directors of the fund, investment advisory services, brokerage commissions, and tax matters, among other information.⁸⁹ Mutual

⁸⁸ Investment Company Act of 1940, USC Sec. 80a-10, DX200, accessed at <http://uscode.house.gov/view.xhtml?req=granuleid:USC-prelim-title15-section80a-10&num=0&edition=prelim>; U.S. Securities and Exchange Commission, “Final Rule: Role of Independent Directors of Investment Companies,” 1940 Act Release No. 24816, effective February 15, 2001, DX185, accessed at <http://www.sec.gov/rules/final/34-43786.htm>.

⁸⁹ U.S. Securities and Exchange Commission, “Information Available to Investment Company Shareholders,” DX205, accessed at <http://www.sec.gov/answers/mfinfo.htm>.

funds are also required to provide shareholders with annual and semi-annual reports; these reports contain updated financial information, a list of securities held at the end of the reporting period and other information. Moreover, these required disclosures must meet SEC mandates not only with respect to content but also to form. These SEC requirements facilitate the comparison of information across funds. SMAs and CITs are not subject to the same requirements. The table below provides a comparison of characteristics of mutual funds and CITs/SMAs.

Characteristics of Mutual Funds vs. SMAs or CITs		
Characteristic	Mutual Funds	SMAs/CITs
Regulatory Body	Regulated under the Investment Company Act of 1940.	Regulated by the Office of the Comptroller of Currency.
Board of At Least 50% Independent Directors/Trustees	Required.	Not required.
Prospectus Requirements	Required.	Not required.
Statements of Additional Information	Required.	Not required.
Annual and Semi-Annual Reports	Required.	Not required.
Disclosures Must Meet SEC Content and Form Mandates	Required.	Not required.

64. For these reasons, mutual funds are widely viewed as having features that benefit shareholders that CITs and SMAs do not, and thus, it is not surprising that many plan fiduciaries elect to include mutual funds among the investment options offered to their plan participants in their retirement plans. For example, a 2009 survey of plan sponsors found that mutual funds are offered by 91 percent of 401(k) plans.⁹⁰ In addition, mutual funds are not only offered, they are

⁹⁰ Deloitte & Touche, *401(k) Benchmarking Survey: Consumer & Industrial Products*, 2009, DX172.0004.

also selected by participants in 401(k) plans. The Investment Company Institute reports that, as of 2009, 55 percent of 401(k) assets (approximately \$1.5 trillion) were invested in mutual funds.⁹¹

65. Dr. Pomerantz himself proposes mutual funds as reasonable alternatives that might result from an “unconflicted process”⁹² for his performance comparisons. Dr. Pomerantz’s own Model 1, which selects “comparable” Vanguard index funds, and Model 2, which selects the “most popular” alternatives within a given fund category, propose mutual funds, not CITs or SMAs, as alternatives for the Actively Managed Proprietary Funds. Thus, Dr. Pomerantz does not view mutual funds as *per se* imprudent when comparing performance but implies that their inclusion was imprudent when comparing fees.

66. Beyond the above flaws in Dr. Pomerantz’s analysis, his own testimony renders irrelevant his claims regarding breaches of fiduciary duty based on supposedly excessive investment management fees relative to the Callan Fee Benchmarks. Specifically, his fee-based analysis relative to the Callan Fee Benchmarks is premised on his claim that the Plan fiduciaries failed “to exercise appropriate prudence ...by failing to investigate the availability of separate account and collective investment trust (CIT) vehicles as lower-cost alternatives to the existing mutual funds in the Plan.”⁹³ However, Dr. Pomerantz testified in his deposition that the Plan offered a stable value option, which is a SMA, throughout the Class Period, which represented between 18 percent and 30 percent of total Plan assets.⁹⁴ Furthermore, Dr. Pomerantz also conceded that Plan

⁹¹ Investment Company Institute, “2010 Investment Company Fact Book,” 2010, Figure 7.7, DX175.0121.

⁹² Pomerantz Deposition, p. 44.

⁹³ Pomerantz Report, p. 5, PX250. Dr. Pomerantz testified in deposition that he considers CITs and SMAs to be the same. (Pomerantz Deposition, p. 35.)

⁹⁴ Pomerantz Deposition, pp. 59-61; 2014 Form 5500 of the Deutsche Bank Matched Savings Plan, JX121.0150 – JX121.0153. *See, also*, **Exhibit 2b**.

fiduciaries in fact evaluated and replaced several investment options in the Plan with CITs during the Class Period, including the replacement of the Dodge & Cox Balance Fund and American Century Strategic Allocation funds with Vanguard Target Date Trusts in 2014.⁹⁵ The fact that the Plan did employ an SMA and CITs and has employed them throughout the Class Period is contradictory to Dr. Pomerantz's claim that Plan fiduciaries failed to consider SMAs or CITs and therefore, his fee-based analysis relative to the Callan Fee Benchmarks is irrelevant, as it does not correspond to the facts of this case.

67. In summary, there are benefits that mutual funds offer investors, including 401(k) participants, that CITs and SMAs do not, which Dr. Pomerantz fails to account for in his fee comparisons. In addition, Dr. Pomerantz's own performance comparisons propose mutual funds, not CITs or SMAs, as alternatives for the Actively Managed Proprietary Funds. Furthermore, the availability of mutual funds in the Plan was consistent with the common practice of other 401(k) plans. Dr. Pomerantz fails to consider this evidence when opining that the failure to consider CITs and SMAs in the Plan was "imprudent."⁹⁶ Lastly, his own testimony revealed that the Plan offered an SMA and CITs during the Class Period, contradicting his claim that Plan fiduciaries failed to consider CITs and SMAs.

C. Dr. Pomerantz's comparison of the expense ratios of the investment options in the Plan to broad Callan medians is inappropriate and misleading

68. For his Callan fee comparison, Dr. Pomerantz compares the expense ratios of both the proprietary and non-proprietary investment options in the Plan to the median expense ratios of

⁹⁵ Pomerantz Deposition, pp. 137-139.

⁹⁶ Pomerantz Report, ¶ 134, PX250.

separate accounts reported by Callan.⁹⁷ This fee comparison is inappropriate for the following reasons.

69. First, Dr. Pomerantz claims that the differences between the expense ratios of both the proprietary and non-proprietary mutual funds in the Plan and the Callan Fee Benchmarks are attributable to the alleged breach by the Plan fiduciaries of “failing to investigate the availability of separate account and collective investment trust (CIT) vehicles as lower-cost alternatives to the existing mutual funds in the Plan.”⁹⁸ However, Dr. Pomerantz testified in deposition that he has not investigated whether the investment advisers of the mutual funds in the Plan offered a CIT or SMA version of each mutual fund.⁹⁹ His analysis is therefore based on a comparison of the fees of a hypothetical SMA or CIT with the fees of the mutual funds in the Plan. Even if the CIT or SMA version of a mutual fund in the Plan were available, Dr. Pomerantz has not performed any analysis to compare the fees and performance of the CIT or SMA version to those of a mutual fund available in the Plan. He therefore cannot determine whether Plan fiduciaries did not replace the mutual funds in the Plan because CIT or SMA version of the same fund was not available or whether the failure to do so represented a fiduciary breach.

70. Dr. Pomerantz also has not offered an opinion on what he would consider to be an excessive expense ratio for a CIT or SMA; that is, he has not opined that he would consider an expense ratio above the Callan median to be excessive for a CIT or SMA. Given that

⁹⁷ Pomerantz Report, ¶ 140, PX250. I note that there is an inconsistency in Dr. Pomerantz’s uses of benchmarks between his fee-based analysis and his performance-based analysis. For his fee comparisons involving SMAs, Dr. Pomerantz compares individual Plan options to medians. However, for his performance comparisons (Models 1 and 2), he compares performance of Plan options to performance of a single individual fund of his choice.

⁹⁸ Pomerantz Report, p. 5, PX250; Pomerantz Deposition, pp. 37-39. Dr. Pomerantz testified in deposition that he considers CITs and SMAs to be the same. (Pomerantz Deposition, p. 35.)

⁹⁹ Pomerantz Deposition, pp. 63-64.

Dr. Pomerantz has not opined on what would be an excessive expense ratio, he therefore has no basis to then opine that the mutual funds in the Plan were excessively costly.

71. Second, Dr. Pomerantz's Callan fee comparison compares the expense ratios of the mutual funds in the Plan to calculated expense ratios that include funds that Dr. Pomerantz has not demonstrated to be comparable to the mutual funds in the Plan. In particular, the Callan median expense ratios consider both actively managed and passively managed SMAs within a broad asset category, whereas the expense ratios of the Actively Managed Proprietary Funds only reflect their active management approach. As discussed above in **Section VI.B.1**, actively managed funds (or SMAs) typically have higher expense ratios than passively managed funds (or SMAs) do. Consequently, the inclusion of passively managed SMAs in the Callan survey biases the resulting median expense ratio calculations downward. According to the Callan survey from which Dr. Pomerantz derives the Callan median expense ratios, passively managed options represent over nine percent of the equity and fixed income separate accounts surveyed in 2011.¹⁰⁰ As a result, the observed differences in expense ratios for the Actively Managed Proprietary Funds and the Callan median expense ratios can be explained, at least in part, by the inclusion of passively managed SMAs in these calculations, rather than allegedly excessive fees.

72. Third, the broad Callan categories used to control for expense ratios across asset types do not accurately reflect the investment strategies of some of the Plan mutual funds. This is important because the costs of implementing different investment strategies necessarily differ and vary depending on the strategy. Dr. Pomerantz fails to control for these differences, which biases his

¹⁰⁰ Callan Investments Institute, "2014 Investment Management Fee Survey: U.S. Institutional Fund Sponsors and Investment Managers," 2014, DX177.0027, DX177.0051-DX177.0053.

resulting fee comparison. For example, Dr. Pomerantz assigns nine funds to the Callan “U.S. Equity” category, regardless of the funds’ market capitalization, geographical focus and sector emphasis, even though these characteristics affect the fund’s expenses.¹⁰¹ For instance, Royce Small Cap Value focuses on small U.S. companies with stock market capitalizations up to \$3 billion,¹⁰² while Deutsche Capital Growth focuses on large U.S. companies with stock market capitalization similar to the members of the S&P 500 and Russell 1000.¹⁰³ In general, a fund with a strategy focusing on small cap equities would have different costs to implement, and thus a different expense ratio, than a fund with a strategy focusing on large cap equities. Despite the differences in market capitalization focuses between these two funds, Dr. Pomerantz compares these Plan investment options to the same Callan “U.S. Equity” category median expense ratio.

73. Furthermore, Dr. Pomerantz also compares the expense ratios of the proprietary investment options in the Plan to expense ratios of the “average 401(k) plan with a similar level of assets,” as reported by ICI.¹⁰⁴ This comparison suffers from the same two criticisms that I discussed immediately above in paragraphs 71 and 72. Moreover, the ICI average expense ratio is not a pure reflection of the investment lineup selected by plan fiduciaries, as Dr. Pomerantz purports it to be. Rather, it is a weighted average based on the allocation of assets of plans in the ICI database, which in turn depends on the investment decisions made by individual participants in those plans.¹⁰⁵ As

¹⁰¹ The nine investment options in the Plan that Dr. Pomerantz assigns to the “U.S. Equity” Callan category are the Deutsche Capital Growth Fund, the Deutsche Large Cap Value Fund, the Deutsche Real Estate Securities Fund, the Lord Abbett Dev Growth I, the GS Midcap Value Inst, the Thornburg Core Growth R5, the Wells Fargo Small Cap Growth, the MFS Value R4, and the Royce Small Cap Value Inst. (Pomerantz Report, Exhibit 4, p. 88, PX250.)

¹⁰² Royce Small-Cap Value Fund Summary Prospectus, May 1, 2017, DX141.

¹⁰³ Deutsche Capital Growth Fund Supplement to Summary Prospectus, February 1, 2017, DX140.

¹⁰⁴ Pomerantz Report, ¶ 136, PX250.

¹⁰⁵ BrightScope and ICI, “The BrightScope/ICI Defined Contribution Plan Profile: A Close Look at 401(k) Plans 2014,” December 2016, Exhibit 4.5, JX137.0053; Pomerantz Report, ¶¶ 136-139, PX250.

such, the individual investment selections and allocations by participants in ICI-surveyed plans influence the ICI average expense ratio in ways that are not relevant to fiduciaries of the Plan. For example, if participants in ICI-surveyed plans chose to hold more assets in passively managed funds relative to actively managed funds, the ICI average expense ratio would be biased downwards because passively managed funds typically have lower expense ratios. The resulting ICI average expense ratio reflects what participants chose to invest in, rather than solely the expense ratios of investment options that ICI-surveyed plan fiduciaries made available in their plan investment lineups.

74. Finally, I note that five of the seven Pomerantz Benchmarks that Dr. Pomerantz uses in his Model 2 performance-based analysis had expense ratios that exceeded Dr. Pomerantz's chosen ICI benchmarks during the majority of the Class Period (as shown in the table below). The Dodge & Cox International Fund had a higher expense ratio than Dr. Pomerantz's chosen ICI benchmark from 2013 to 2016. The Fidelity Contrafund, the PIMCO Total Return Fund, the Fidelity Capital & Income Fund, and the Dodge & Cox Stock Fund had higher expense ratios than Dr. Pomerantz's chosen ICI benchmarks for each of those funds in every year from 2010 to 2016. For this period, the Fidelity Capital & Income Fund, for example, had an expense ratio of 71 to 77 basis points compared to Dr. Pomerantz's chosen ICI benchmark of 30 to 36 basis points.

Comparison of the Expense Ratios of Dr. Pomerantz's Model 2 Benchmarks to His ICI Benchmarks 2010 - 2016								Dr. Pomerantz's Alternative is Above ICI Benchmark a Majority of Years
Model 2 Pomerantz Alternative	2010	2011	2012	2013	2014	2015	2016	
Fidelity Contrafund	0.910	0.810	0.740	0.660	0.640	0.710	0.680	Yes (100.0%)
ICI Benchmark Fees: Domestic Equity	0.518	0.486	0.454	0.422	0.390	0.390	0.390	
Difference	0.392	0.324	0.286	0.238	0.250	0.320	0.290	
PIMCO Total Return Fund; Institutional	0.460	0.460	0.460	0.460	0.460	0.460	0.460	Yes (100.0%)
ICI Benchmark Fees: Domestic Fixed Income	0.364	0.348	0.332	0.316	0.300	0.300	0.300	
Difference	0.096	0.112	0.128	0.144	0.160	0.160	0.160	
Dodge & Cox International Stock Fund	0.650	0.640	0.640	0.640	0.640	0.640	0.640	Yes (57.1%)
ICI Benchmark Fees: International Equity	0.734	0.688	0.642	0.596	0.550	0.550	0.550	
Difference	-0.084	-0.048	-0.002	0.044	0.090	0.090	0.090	
American Funds New Perspective Fund; R5	0.510	0.510	0.500	0.500	0.490	0.490	0.500	No (0.0%)
ICI Benchmark Fees: International Equity	0.734	0.688	0.642	0.596	0.550	0.550	0.550	
Difference	-0.224	-0.178	-0.142	-0.096	-0.060	-0.060	-0.050	
Fidelity Capital & Income Fund	0.760	0.760	0.770	0.730	0.710	0.720	0.750	Yes (100.0%)
ICI Benchmark Fees: Domestic Fixed Income	0.364	0.348	0.332	0.316	0.300	0.300	0.300	
Difference	0.396	0.412	0.438	0.414	0.410	0.420	0.450	
Dodge & Cox Stock Fund	0.520	0.520	0.520	0.520	0.520	0.520	0.520	Yes (100.0%)
ICI Benchmark Fees: Domestic Equity	0.518	0.486	0.454	0.422	0.390	0.390	0.390	
Difference	0.002	0.034	0.066	0.098	0.130	0.130	0.130	
TIAA-CREF Real Estate Securities Fund; Inst	0.560	0.570	0.540	0.530	0.520	0.520	0.470	No (0.0%)
ICI Benchmark Fees: Other	0.744	0.698	0.652	0.606	0.560	0.560	0.560	
Difference	-0.184	-0.128	-0.112	-0.076	-0.040	-0.040	-0.090	
Number of Dr. Pomerantz's Model 2 Alternatives Above ICI Benchmark:								5/7
Sources: BrightScope & ICI, "The BrightScope/ICI Defined Contribution Plan Profile: A Close Look at 401(k) Plans, 2014," December 2016, JX_137; Lipper for Investment Management.								

75. In sum, Dr. Pomerantz's use of ICI benchmarks suffers from some of the same flaws as his Callan comparison (the value he uses mixes expense ratios for active and passive funds or SMAs, and he misaligns subject funds' investment categories and those used by ICI). In addition, many of Dr. Pomerantz's own Model 2 comparators had expense ratios higher than the ICI average expense ratios. His ICI comparison therefore also is insufficient to demonstrate that the Actively Managed Proprietary Funds offered in the Plan were excessively costly.

D. The expense ratios of the proprietary investment options in the Plan were within the range of peer funds

76. While it is not meaningful to evaluate cost without taking into account the benefits associated with those costs, documents in the record indicate that the expense ratios of the

investment options in the Plan are consistent with those of peer mutual funds. From an economic perspective, the investment options in the Plan were offered to investors in the general marketplace of an industry that exhibits the structural characteristics of a competitive market.¹⁰⁶ Therefore, the fees of peer mutual funds provide an appropriate comparison group for the fees of the investment options in the Plan for purposes of determining whether the fees were excessively high which could indicate that the inclusion of the Proprietary Funds was imprudent.

77. [Content omitted] As part of the 15(c) process, Lipper conducted an annual [Content omitted] analysis that benchmarks the expense ratios of the proprietary mutual funds in the Plan to those of their Lipper peer group.¹⁰⁷ [Content omitted] For example, the Lipper expense report provided in the 2012 15(c) materials showed that all but three of the nine proprietary funds then remaining in the Plan had total net expenses equal to or less than the median for their respective Lipper peer groups.¹⁰⁸ [Content omitted]¹⁰⁹

[Content omitted]

¹⁰⁶ The structure of the mutual fund industry provides protection against the excessive fees alleged by Plaintiffs. Investors are currently able to choose from among a very large numbers of funds. As of 2016, 850 advisers offered 8,066 mutual funds. (Investment Company Institute, “2017 Investment Company Factbook,” 2017, DX182.0034, DX182.0192.) Substantial research has also shown that investor demand for mutual funds is sensitive to fund returns, net of fees. (Capon, N., et al., “An Individual Level Analysis of Mutual Fund Investment Decision,” *Journal of Financial Services Research*, 1996, DX168.0010; Sirri, E. and Tufano, P., “Costly Search and Mutual Fund Flows,” *The Journal of Finance*, 53(5), 1998, JX139.0010-JX139.0011; and Khorana, A., and Servaes, H., “Conflicts of Interest and Competition in the Mutual Fund Industry,” *Social Science Research Network*, July 2004, DX188.0022.)

¹⁰⁷ See generally *infra* ¶¶ 44 and 45; [Content omitted] see also DWS Funds Board Annual Contract Review 2012, Book II. Expense Reports Fund-by-Fund Lipper 15(c) Reports, DX154.0010 – DX154.0013).

¹⁰⁸ The three other funds are the Deutsche EAFE Equity Index Fund, the Deutsche Core Fixed Income Fund, and the Deutsche Global Growth Fund. (DWS Funds Board Annual Contract Review 2012, Book II. Expense Reports Fund-by-Fund Lipper 15(c) Reports, DX154.)

¹⁰⁹ [Content omitted]

78. In addition, Dr. Pomerantz fails to consider that the expense ratios for the Deutsche Capital Growth Fund and the Deutsche High Income Fund as of December 2009 were, in fact, lower than the expense ratios of their respective Model 2 Pomerantz Benchmarks, as shown in **Exhibit 5**. Dr. Pomerantz never reconciles this apparent conflict between his Model 2 Pomerantz Benchmarks and his claim that the Actively Managed Proprietary Funds were “excessively-costly.”¹¹⁰

79. In sum, the expense ratios of proprietary options were [Content omitted], in some cases, lower than Dr. Pomerantz’s own selected alternative funds. Dr. Pomerantz fails to consider this evidence, which runs counter to his claim that the Proprietary Funds were excessively costly.

VII. Dr. Pomerantz Fails to Establish that the Inclusion of the Proprietary Index Funds Was Imprudent or that their Selection Was Detrimental to Plan Participants

80. Dr. Pomerantz also opines that “[b]y retaining the proprietary index funds in the Plan from December 2009 until February 2013, the Plan’s fiduciaries failed to manage the Plan with the level of prudence or loyalty that a fiduciary managing a similar defined contribution plan would have exhibited.”¹¹¹ These three proprietary index funds were the DWS EAFE Equity Index Fund, the DWS Equity 500 Index Fund, and the DWS U.S. Bond Index Fund (collectively, the “Proprietary Index Funds”). Dr. Pomerantz claims that the inclusion of the Proprietary Index Funds “[d]emonstrates the Plan [f]iduciaries’ [d]isloyalty” because: (1) they were “[h]igh-[c]ost;” and (2) they may have “fail[ed] to accurately track their index.”¹¹²

¹¹⁰ Pomerantz Report, ¶ 9, PX250.

¹¹¹ Pomerantz Report, ¶ 71, PX250.

¹¹² Pomerantz Report, p. 25, ¶ 68, PX250.

81. Dr. Pomerantz’s opinion that the Proprietary Index Funds were excessively expensive is based on Dr. Pomerantz’s selection and comparison to alternative funds that have the lowest fees within their respective Morningstar categories. [Content edited to conform with original report:] His analysis ignores that the expense ratios of all but three of the nine proprietary funds in the Plan in 2012, including two of the Proprietary Index Funds, were equal to or below the median of expense ratios of their respective Lipper peers according to Lipper’s analysis conducted as part of the 15(c) process discussed in paragraph 77 above. [Content omitted]¹¹³ By selecting the single lowest-fee alternative to evaluate the expense ratio of each Proprietary Index Fund, Dr. Pomerantz has only demonstrated that a lower fee alternative was available, not that the fees associated with the Proprietary Index Funds were excessive or that the inclusion of these Proprietary Index Funds was imprudent. Because the expense ratios of the Proprietary Index Funds fall well within the distribution of the expense ratios of their respective Lipper peers, Dr. Pomerantz has not shown that retaining these funds was imprudent.

82. Dr. Pomerantz also claims that the inclusion of the Proprietary Index Funds was a breach of fiduciary duty because they may have “fail[ed] to accurately track their index” (*i.e.*, the tracking error of the Proprietary Index Funds was too high).¹¹⁴ However, Dr. Pomerantz testified during his deposition that he does not have an opinion about whether an index fund with a tracking error relative to the actual index is an imprudent choice. In other words, he has no opinion on whether any “tracking error” he might observe for the Proprietary Index Funds demonstrates a fiduciary

¹¹³ DWS Funds Board Annual Contract Review 2012, Book II. Expense Reports Fund-by-Fund Lipper 15(c) Reports, DX154.0035, DX154.0044, and DX154.0200.

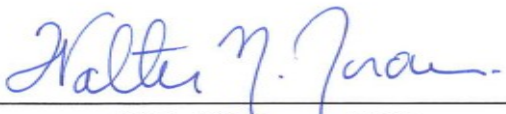
¹¹⁴ Pomerantz Report, ¶ 68, PX250.

breach.¹¹⁵ Thus, Dr. Pomerantz's opinions on "tracking error" are irrelevant as they are unsupported and disconnected from any claims regarding fiduciary breaches.¹¹⁶

83. In sum, Dr. Pomerantz has not shown that the Proprietary Index Funds either had excessive fees or had excessive tracking error relative to their peers. As a result, he has failed to support his opinion that the inclusion of these funds was imprudent.

VIII. [Content omitted]

I declare under penalty that the foregoing is true and correct.
Executed on July 2, 2018



Walter N. Torous, Ph.D.

¹¹⁵ Pomerantz Deposition, pp. 178-182.

¹¹⁶ Nevertheless, even if he offered an opinion that a fund with tracking error represents an imprudent choice, Dr. Pomerantz fails to consider whether the Proprietary Index Funds had tracking errors significantly greater than those of their respective peers. As shown in **Exhibit 8**, the tracking error of each Proprietary Index Fund typically was at or below the median tracking error of other index funds that track the same index as the Proprietary Index Funds. As such, Dr. Pomerantz has not established that the Proprietary Index Funds had excessive tracking error, or that they otherwise failed to accurately track their index. He has therefore failed to demonstrate that the Proprietary Index Funds' tracking error demonstrates that their inclusion was imprudent.

EXHIBIT 1

Exhibit 1**Deutsche Bank Matched Savings Plan****Plan Summary***2009 - Q1 2017*

	2009	2010	2011	2012	2013	2014	2015	2016	Q1 2017
<i>Total Contributions (in millions)</i> ^[3]	\$162.7	\$172.7	\$179.8	\$178.3	\$171.8	\$177.0	\$196.7	\$215.9	--
<i>Number of Participants</i> ^[4]									
Active Participants	11,682	11,638	11,586	10,872	10,508	10,075	10,819	10,509	--
Retired, Separated, or Deceased Participants	10,974	11,330	10,732	11,050	10,645	9,943	9,869	9,747	--
Total	22,656	22,968	22,318	21,922	21,153	20,018	20,688	20,256	--
<i>Total Plan Assets (\$ in millions)</i>	\$1,903	\$2,112	\$2,093	\$2,317	\$2,731	\$2,838	\$2,760	\$2,880	\$3,037
<i>Average Assets per Participant (\$ in thousands)</i>	\$84	\$92	\$94	\$106	\$129	\$142	\$133	\$142	--
<i>Total Proprietary Funds Offered in Plan Lineup</i>	10	10	9	9	6	6	6	4	3
<i>Total Funds Offered in Plan Lineup</i> ^[5]	22	21	20	20	18	18	18	16	16

Notes:

[1] Participant level account balance observations for which the investment option identifier was blank were excluded from this analysis.

[2] Data are as of year-end for all years except 2017, which are as of March 31.

[3] Total contributions include employee contributions, employer contributions and rollovers.

[4] Taken from Deutsche Bank Matched Savings Plan Form 5500s.

[5] Brokerage Fund Options/Self-Directed Brokerage are omitted from the count. Target-date funds in the same series are counted as one investment option.

Sources:

MSP Participant Account Balance Data, DX057; Deutsche Bank Matched Savings Plan Form 5500s, DX150, JX116, JX117, JX118, JX119, JX120, JX121, JX122, JX209; Fidelity Trial Balance DB MSP January 1, 2017 to January 31, 2017, DX142.0003; 2017-04 Trial Balance, JX138.0003.

EXHIBIT 2a

Deutsche Bank Matched Savings Plan
Assets in Millions Invested In Each Investment Option
Q4 2009 - Q1 2017

	As of December 31,								As of Mar. 31,
	2009	2010	2011	2012	2013	2014	2015	2016	2017
Proprietary Mutual Funds ^[2]									
Deutsche Capital Growth Fund	\$77	\$88	\$81	\$91	\$119	\$132	\$154	\$139	-
Deutsche Core Fixed Income Fund	\$51	\$56	\$59	\$66	\$57	\$58	\$57	\$60	\$61
Deutsche CROCI International Fund	\$11	\$12	-	-	-	-	-	-	-
Deutsche Global Growth Fund	\$15	\$16	\$14	\$15	\$19	\$17	\$18	-	-
Deutsche High Income Fund	\$20	\$23	\$27	\$42	\$41	\$42	\$35	\$40	\$41
Deutsche Large Cap Value Fund	\$70	\$75	\$72	\$76	\$95	\$101	\$86	-	-
Deutsche Real Estate Securities Fund	\$46	\$64	\$73	\$91	\$87	\$107	\$104	\$106	\$102
DWS EAFE Equity Index Fund	\$55	\$56	\$46	\$51	-	-	-	-	-
DWS Equity 500 Index Fund	\$312	\$355	\$345	\$388	-	-	-	-	-
DWS U.S. Bond Index Fund	\$50	\$54	\$59	\$63	-	-	-	-	-
Total Proprietary Mutual Funds	\$705	\$797	\$776	\$883	\$418	\$457	\$453	\$345	\$204
Non-Proprietary Mutual Funds									
American Century Strategic Allocation Aggressive Fund	\$37	\$47	\$48	\$55	-	-	-	-	-
American Century Strategic Allocation Conservative Fund	\$16	\$18	\$20	\$24	-	-	-	-	-
American Century Strategic Allocation Moderate Fund	\$18	\$23	\$24	\$28	-	-	-	-	-
AMG Timesquare Mid Cap Growth Fund	-	-	-	-	-	-	-	-	\$86
Dodge & Cox Balanced Fund	\$175	\$207	\$292	\$351	-	-	-	-	-
Dodge & Cox International Stock Fund	\$136	\$153	\$126	\$143	\$179	\$173	\$143	\$137	\$154
Goldman Sachs Mid Cap Value Fund	\$19	\$40	\$46	\$56	\$88	\$103	\$84	\$85	-
Janus INTECH Risk-Managed Growth Fund	\$3	-	-	-	-	-	-	-	-
Lord Abbett Developing Growth Fund	-	-	\$101	\$108	\$175	\$170	\$151	\$141	\$150
MFS Value Fund	\$1	\$3	\$5	\$6	\$18	\$19	\$29	\$131	\$133
Primecap Odyssey Growth Fund	-	-	-	-	-	-	-	-	\$152
Royce Small Cap Value Fund	\$9	\$16	\$20	\$19	\$22	\$22	\$18	-	-
T. Rowe Price Institutional Global Growth Equity Fund	-	-	-	-	-	-	-	\$17	\$20
Thornburg Core Growth Fund	\$102	\$102	-	-	-	-	-	-	-
Vanguard Extended Market Index Fund	-	-	-	-	\$20	\$28	\$36	\$50	\$61
Vanguard Institutional Index Fund	-	-	-	-	\$491	\$532	\$515	\$557	\$596
Vanguard Total Bond Market Index Fund	-	-	-	-	\$55	\$57	\$58	\$63	\$64
Vanguard Total International Stock Index Fund	-	-	-	-	\$62	\$57	\$56	\$64	\$71
Wells Fargo Advisors Small Cap Growth Fund	\$85	\$113	-	-	-	-	-	-	-
William Blair International Growth Fund	-	-	\$11	\$16	\$24	\$22	\$25	\$23	\$26
Total Non-Proprietary Mutual Funds	\$601	\$721	\$693	\$807	\$1,133	\$1,184	\$1,114	\$1,268	\$1,514
Non-Proprietary Trust Options ^[3]									
Vanguard Target Retirement 2010 Trust I	-	-	-	-	\$10	\$10	\$9	\$9	\$8
Vanguard Target Retirement 2015 Trust I	-	-	-	-	\$23	\$43	\$35	\$33	\$27
Vanguard Target Retirement 2020 Trust I	-	-	-	-	\$44	\$45	\$44	\$45	\$47
Vanguard Target Retirement 2025 Trust I	-	-	-	-	\$80	\$83	\$83	\$88	\$93
Vanguard Target Retirement 2030 Trust I	-	-	-	-	\$101	\$109	\$105	\$113	\$124
Vanguard Target Retirement 2035 Trust I	-	-	-	-	\$90	\$95	\$93	\$100	\$109
Vanguard Target Retirement 2040 Trust I	-	-	-	-	\$77	\$83	\$86	\$97	\$108
Vanguard Target Retirement 2045 Trust I	-	-	-	-	\$61	\$67	\$68	\$78	\$90
Vanguard Target Retirement 2050 Trust I	-	-	-	-	\$40	\$46	\$51	\$63	\$74
Vanguard Target Retirement 2055 Trust I	-	-	-	-	\$16	\$20	\$23	\$30	\$38
Vanguard Target Retirement 2060 Trust I	-	-	-	-	\$2	\$3	\$5	\$10	\$14
Vanguard Target Retirement Income Trust I	-	-	-	-	\$7	\$8	\$6	\$7	\$7
Total Non-Proprietary Trust Options	-	-	-	-	\$552	\$611	\$609	\$674	\$739

Deutsche Bank Matched Savings Plan
Assets in Millions Invested In Each Investment Option
Q4 2009 - Q1 2017

	As of December 31,								As of
	2009	2010	2011	2012	2013	2014	2015	2016	Mar. 31, 2017
DB Stable Value Fund	\$565	\$561	\$590	\$589	\$584	\$542	\$536	\$549	\$535
Self-Directed Brokerage Account	\$31	\$32	\$35	\$38	\$44	\$43	\$47	\$44	\$45
Total Plan Assets	\$1,903	\$2,112	\$2,093	\$2,317	\$2,731	\$2,838	\$2,760	\$2,880	\$3,037

Notes:

[1] Participant level account balance observations for which the investment option identifier was blank were excluded from this analysis.

[2] Proprietary Mutual Funds are identified as mutual funds where the Fund Management Company Name is listed as “Deutsche Asset & Wealth Management” in Lipper. Note that this excludes the DB Stable Value Fund, which is a collective investment trust and was sold by Deutsche Asset Management to Goldman Sachs on March 6, 2014.

[3] The Vanguard Target Date investment options are collective investment trusts, not mutual funds (Deutsche Bank Matched Savings Plan Participant Disclosure Notice, September 9, 2014, p. 12).

[4] “-” indicates that the investment option was not in the Plan during the given period.

Sources:

MSP Participant Account Balance Data, DX057; Deutsche Bank Matched Savings Plan Participant Disclosure Notice, September 9, 2014, DX058; Lipper for Investment Management; Discretionary Advisory Agreement between GSAM Stable Value, LLC and Deutsche Bank Americas Holding Corp dated March 6, 2014, DX238; Deutsche Bank Matched Savings Plan Quarterly Investment Review, Fourth Quarter 2015, JX183; Deutsche Bank Matched Savings Plan Form 5500, 2016, DX150; Fidelity Trial Balance DB MSP January 1, 2017 to January 31, 2017, DX142.0003; 2017-04 Trial Balance, JX138.0003.

Deutsche Bank Matched Savings Plan
Percent of Assets Invested In Each Investment Option
Q4 2009 - Q1 2017

	As of December 31,								As of Mar. 31,
	2009	2010	2011	2012	2013	2014	2015	2016	2017
Proprietary Mutual Funds ^[2]									
Deutsche Capital Growth Fund	4.0%	4.2%	3.9%	3.9%	4.3%	4.7%	5.6%	4.8%	-
Deutsche Core Fixed Income Fund	2.7%	2.6%	2.8%	2.8%	2.1%	2.0%	2.1%	2.1%	2.0%
Deutsche CROCI International Fund	0.6%	0.6%	-	-	-	-	-	-	-
Deutsche Global Growth Fund	0.8%	0.8%	0.7%	0.7%	0.7%	0.6%	0.7%	-	-
Deutsche High Income Fund	1.1%	1.1%	1.3%	1.8%	1.5%	1.5%	1.3%	1.4%	1.4%
Deutsche Large Cap Value Fund	3.7%	3.5%	3.4%	3.3%	3.5%	3.5%	3.1%	-	-
Deutsche Real Estate Securities Fund	2.4%	3.0%	3.5%	3.9%	3.2%	3.8%	3.8%	3.7%	3.3%
DWS EAFE Equity Index Fund	2.9%	2.6%	2.2%	2.2%	-	-	-	-	-
DWS Equity 500 Index Fund	16.4%	16.8%	16.5%	16.7%	-	-	-	-	-
DWS U.S. Bond Index Fund	2.6%	2.5%	2.8%	2.7%	-	-	-	-	-
Total Proprietary Mutual Funds	37.1%	37.7%	37.1%	38.1%	15.3%	16.1%	16.4%	12.0%	6.7%
Non-Proprietary Mutual Funds									
American Century Strategic Allocation Aggressive Fund	2.0%	2.2%	2.3%	2.4%	-	-	-	-	-
American Century Strategic Allocation Conservative Fund	0.9%	0.9%	1.0%	1.0%	-	-	-	-	-
American Century Strategic Allocation Moderate Fund	1.0%	1.1%	1.1%	1.2%	-	-	-	-	-
AMG Timesquare Mid Cap Growth Fund	-	-	-	-	-	-	-	-	2.8%
Dodge & Cox Balanced Fund	9.2%	9.8%	13.9%	15.1%	-	-	-	-	-
Dodge & Cox International Stock Fund	7.2%	7.3%	6.0%	6.2%	6.6%	6.1%	5.2%	4.8%	5.1%
Goldman Sachs Mid Cap Value Fund	1.0%	1.9%	2.2%	2.4%	3.2%	3.6%	3.0%	2.9%	-
Janus INTECH Risk-Managed Growth Fund	0.2%	-	-	-	-	-	-	-	-
Lord Abbett Developing Growth Fund	-	-	4.8%	4.7%	6.4%	6.0%	5.5%	4.9%	4.9%
MFS Value Fund	0.0%	0.1%	0.2%	0.3%	0.7%	0.7%	1.1%	4.6%	4.4%
Primecap Odyssey Growth Fund	-	-	-	-	-	-	-	-	5.0%
Royce Small Cap Value Fund	0.5%	0.7%	0.9%	0.8%	0.8%	0.8%	0.6%	-	-
T. Rowe Price Institutional Global Growth Equity Fund	-	-	-	-	-	-	-	0.6%	0.7%
Thornburg Core Growth Fund	5.3%	4.8%	-	-	-	-	-	-	-
Vanguard Extended Market Index Fund	-	-	-	-	0.7%	1.0%	1.3%	1.7%	2.0%
Vanguard Institutional Index Fund	-	-	-	-	18.0%	18.8%	18.6%	19.3%	19.6%
Vanguard Total Bond Market Index Fund	-	-	-	-	2.0%	2.0%	2.1%	2.2%	2.1%
Vanguard Total International Stock Index Fund	-	-	-	-	2.3%	2.0%	2.0%	2.2%	2.3%
Wells Fargo Advisors Small Cap Growth Fund	4.5%	5.4%	-	-	-	-	-	-	-
William Blair International Growth Fund	-	-	0.5%	0.7%	0.9%	0.8%	0.9%	0.8%	0.8%
Total Non-Proprietary Mutual Funds	31.6%	34.1%	33.1%	34.8%	41.5%	41.7%	40.4%	44.0%	49.9%
Non-Proprietary Trust Options ^[3]									
Vanguard Target Retirement 2010 Trust I	-	-	-	-	0.4%	0.3%	0.3%	0.3%	0.3%
Vanguard Target Retirement 2015 Trust I	-	-	-	-	0.8%	1.5%	1.3%	1.2%	0.9%
Vanguard Target Retirement 2020 Trust I	-	-	-	-	1.6%	1.6%	1.6%	1.6%	1.5%
Vanguard Target Retirement 2025 Trust I	-	-	-	-	2.9%	2.9%	3.0%	3.1%	3.1%
Vanguard Target Retirement 2030 Trust I	-	-	-	-	3.7%	3.8%	3.8%	3.9%	4.1%
Vanguard Target Retirement 2035 Trust I	-	-	-	-	3.3%	3.4%	3.4%	3.5%	3.6%
Vanguard Target Retirement 2040 Trust I	-	-	-	-	2.8%	2.9%	3.1%	3.4%	3.6%
Vanguard Target Retirement 2045 Trust I	-	-	-	-	2.2%	2.4%	2.5%	2.7%	3.0%
Vanguard Target Retirement 2050 Trust I	-	-	-	-	1.5%	1.6%	1.9%	2.2%	2.4%
Vanguard Target Retirement 2055 Trust I	-	-	-	-	0.6%	0.7%	0.8%	1.1%	1.2%
Vanguard Target Retirement 2060 Trust I	-	-	-	-	0.1%	0.1%	0.2%	0.3%	0.5%
Vanguard Target Retirement Income Trust I	-	-	-	-	0.3%	0.3%	0.2%	0.2%	0.2%
Total Non-Proprietary Trust Options	-	-	-	-	20.2%	21.5%	22.1%	23.4%	24.3%

EXHIBIT 2b

Deutsche Bank Matched Savings Plan
Percent of Assets Invested In Each Investment Option
Q4 2009 - Q1 2017

	As of December 31,								As of
	2009	2010	2011	2012	2013	2014	2015	2016	Mar. 31, 2017
DB Stable Value Fund	29.7%	26.6%	28.2%	25.4%	21.4%	19.1%	19.4%	19.1%	17.6%
Self-Directed Brokerage Account	1.6%	1.5%	1.7%	1.6%	1.6%	1.5%	1.7%	1.5%	1.5%
Total Plan Assets	100%	100%	100%	100%	100%	100%	100%	100%	100%

Notes:

[1] Participant level account balance observations for which the investment option identifier was blank were excluded from this analysis.

[2] Proprietary Mutual Funds are identified as mutual funds where the Fund Management Company Name is listed as “Deutsche Asset & Wealth Management” in Lipper. Note that this excludes the DB Stable Value Fund, which is a collective investment trust and was sold by Deutsche Asset Management to Goldman Sachs on March 6, 2014.

[3] The Vanguard Target Date investment options are collective investment trusts, not mutual funds (Deutsche Bank Matched Savings Plan Participant Disclosure Notice, September 9, 2014, p. 12).

[4] “-” indicates that the investment option was not in the Plan during the given period.

Sources:

MSP Participant Account Balance Data, DX057; Deutsche Bank Matched Savings Plan Participant Disclosure Notice, September 9, 2014, DX058; Lipper for Investment Management; Discretionary Advisory Agreement between GSAM Stable Value, LLC and Deutsche Bank Americas Holding Corp dated March 6, 2014, DX238; Deutsche Bank Matched Savings Plan Quarterly Investment Review, Fourth Quarter 2015, JX183; Deutsche Bank Matched Savings Plan Form 5500, 2016, DX150; Fidelity Trial Balance DB MSP January 1, 2017 to January 31, 2017, DX142.0003; 2017-04 Trial Balance, JX138.0003.

EXHIBIT 3

Exhibit 3**Distribution of Deutsche Bank Matched Savings Plan Participants By Number of Investment Options Held in the Plan***2009 - 2016*

Number of Options Held	2009		2010		2011		2012		2013		2014		2015		2016	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1	6,528	30%	7,097	32%	6,783	32%	7,133	34%	6,949	34%	7,460	36%	7,849	37%	8,106	38%
2 - 5	9,944	46%	9,682	44%	9,575	45%	9,140	43%	9,172	44%	8,581	41%	8,283	39%	8,222	38%
6 - 10	4,475	21%	4,504	20%	4,279	20%	4,212	20%	3,928	19%	3,721	18%	3,649	17%	3,561	17%
11 - 15	655	3%	680	3%	650	3%	637	3%	530	3%	887	4%	1,397	7%	1,513	7%
16 - 20	87	0%	109	0%	120	1%	143	1%	78	0%	69	0%	80	0%	23	0%
20+	20	0%	8	0%	0	0%	0	0%	--	--	--	--	--	--	--	--
<i>Total Funds Offered in Plan Lineup</i>	22		21		20		20		18		18		18		16	

Notes:

[1] Brokeragelink accounts and Self-Directed Brokerage Accounts are not included in Number of Options Held/Offered. Participants invested only in these options are not included in this analysis.

[2] Data are as of year-end for all years except 2016, which are as of September 30.

[3] Target-date funds in the same series are counted as one investment option.

Source:

MSP Participant Account Balance Data, DX057.

EXHIBIT 4

Exhibit 4

**Comparison of the Prospectus Benchmark
of the Actively Managed Proprietary Funds and the Pomerantz Benchmarks**

January 2010 - September 2017

				Annualized Return of Prospectus Benchmark ^[3]
Fund Name		Prospectus Benchmark ^[2]		
1.	Actively Managed Proprietary Fund	Deutsche Capital Growth Fund	Russell 1000 Growth TR USD	14.45%
	Model 1	Vanguard Growth Index Fund;Institutional	MSCI US Prime Market Growth Index / CRSP US Large Cap Growth TR USD	14.14%
	Model 2	Fidelity Contrafund	S&P 500 TR USD	13.46%
2.	Actively Managed Proprietary Fund	Deutsche Core Fixed Income Fund	BBgBarc US Agg Bond TR USD	3.68%
	Model 1	Vanguard Total Bond Market Index Fund;Inst	BBgBarc US Agg Float Adj TR USD	3.71%
	Model 2	PIMCO Total Return Fund;Institutional	BBgBarc US Agg Bond TR USD	3.68%
3.	Actively Managed Proprietary Fund	Deutsche CROCI International Fund	MSCI EAFE NR USD	8.56%
	Model 1	Vanguard Total International Stock Index Fund;Inst	MSCI EAFE&EM NR USD / MSCI ACWI Ex USA NR USD / FTSE Global All Cap ex US (USA) NR USD	9.51%
	Model 2	Dodge & Cox International Stock Fund	MSCI EAFE NR USD	8.56%
4.	Actively Managed Proprietary Fund	Deutsche Global Growth Fund	MSCI World NR USD	7.87%
	Model 1	Vanguard Total World Stock Index Fund;Inst	FTSE All World NR USD / FTSE Global All Cap (US RIC) NR USD	N/A
	Model 2	American Funds New Perspective Fund;R5	MSCI World NR USD / MSCI ACWI NR USD	6.76%
5.	Actively Managed Proprietary Fund	Deutsche High Income Fund	Credit Suisse HY USD / BofAML US HY Master II Constnd TR USD	7.95%
	Model 1	BofAML US HY Master II Constnd TR USD	n/a - prospectus benchmark	8.13%
	Model 2	Fidelity Capital & Income Fund	BofAML US HY Master II Constnd TR USD	8.13%

Exhibit 4

**Comparison of the Prospectus Benchmark
of the Actively Managed Proprietary Funds and the Pomerantz Benchmarks**

January 2010 - September 2017

				Annualized Return of Prospectus Benchmark ^[3]
		Fund Name	Prospectus Benchmark ^[2]	
6.	Actively Managed Proprietary Fund	Deutsche Large Cap Value Fund	Russell 1000 Value TR USD	11.97%
	Model 1	Vanguard Value Index Fund;Institutional	MSCI US Prime Market Value Index / CRSP US Large Cap Value TR USD	12.24%
	Model 2	Dodge & Cox Stock Fund	S&P 500 TR USD	12.98%
7.	Actively Managed Proprietary Fund	Deutsche Real Estate Securities Fund	S&P 500 TR USD	13.46%
	Model 1	Vanguard REIT Index Fund;Institutional	MSCI US REIT GR USD	12.75%
	Model 2	TIAA-CREF Real Estate Securities Fund;Inst	FTSE NAREIT All Equity REITs TR USD	13.05%

Notes:

[1] Prospectus benchmarks for each fund reflect all the primary prospectus benchmarks during the period.

[2] "n/a - benchmark index" denotes that the Pomerantz Benchmark is the Actively Managed Proprietary Fund's prospectus benchmark.

[3] Annualized Return of Prospectus Benchmark is calculated for the period in which the Actively Managed Proprietary Fund was offered in the Plan and reflects changes in the primary prospectus benchmarks.

[4] In 2013, the prospectus benchmark for Vanguard Growth Index Fund changed from MSCI US Prime Market Growth Index to CRSP US Large Cap Growth TR USD.

[5] In 2010, the prospectus benchmark for Vanguard Total International Stock Index Fund changed from MSCI EAFE + Emerging Markets Index to MSCI ACWI Ex USA NR USD. In 2013, the prospectus benchmark for Vanguard Total International Stock Index Fund changed from MSCI ACWI Ex USA NR USD to FTSE Global All Cap ex US (USA) NR USD.

[6] In 2011, the prospectus benchmark for Vanguard World Total Stock Market Index Fund changed from FTSE All World NR USD to FTSE Global All Cap (US RIC) NR USD. Returns for the FTSE Global All Cap (US RIC) NR USD were not available for the entire period.

[7] In 2010, the prospectus benchmark for American Funds New Perspective Fund changed from MSCI World Index to MSCI ACWI NR USD.

[8] In 2016, the prospectus benchmark for Deutsche High Income Fund changed from Credit Suisse High Yield Index to BofAML US HY Master II Constnd TR USD.

[9] In 2013, the prospectus benchmark for Vanguard Value Index Fund changed from MSCI US Prime Market Value Index to CRSP US Large Cap Value TR USD.

Sources:

Pomerantz Report, PX250; Morningstar Direct; SEC Edgar; MSCI.

EXHIBIT 5

Performance Statistics of Actively Managed Proprietary Funds and the Pomerantz Benchmarks

December 2009

	Assets Under Management (in millions)	Fee	Annualized 5-Year Statistics		
			Cumulative Return	Standard Deviation	Sharpe Ratio
Deutsche Capital Growth Fund	\$1,771	0.71%	2.33%	14%	-0.03
Model 1: Vanguard Growth Index Fund;Institutional	\$15,670	0.08%	1.79%	16%	-0.06
Model 2: Fidelity Contrafund	\$63,892	1.02%	4.75%	15%	0.13
Deutsche Core Fixed Income Fund	\$605	0.55%	0.78%	5%	-0.39
Model 1: Vanguard Total Bond Market Index Fund;Inst	\$67,871	0.07%	5.04%	4%	0.63
Model 2: PIMCO Total Return Fund;Institutional	\$201,742	0.45%	6.85%	4%	0.97
Deutsche CROCI International Fund	\$1,261	0.81%	3.15%	22%	0.02
Model 1: Vanguard Total International Stock Index Fund;Inst	\$26,044	0.27%	5.26%	21%	0.12
Model 2: Dodge & Cox International Stock Fund	\$36,748	0.65%	5.59%	23%	0.13
Deutsche Global Growth Fund ³	\$1,221	1.12%	36.40%	23%	1.55
Model 1: Vanguard Total World Stock Index Fund;Inst	\$757	0.25%	25.81%	25%	1.02
Model 2: American Funds New Perspective Fund;R5	\$43,835	0.52%	29.67%	22%	1.37
Deutsche High Income Fund	\$1,533	0.67%	4.93%	11%	0.21
Model 1: BofAML US HY Master II Constrnd	-	-	6.40%	13%	0.28
Model 2: Fidelity Capital & Income Fund	\$11,493	0.78%	7.64%	14%	0.35
Deutsche Large Cap Value Instl	\$1,629	0.63%	1.66%	15%	-0.07
Model 1: Vanguard Value Index Fund;Institutional	\$11,641	0.08%	0.19%	17%	-0.15
Model 2: Dodge & Cox Stock Fund	\$39,991	0.52%	-0.69%	19%	-0.18
Deutsche Real Estate Sec Instl	\$973	0.63%	0.75%	32%	-0.06
Model 1: Vanguard REIT Index Fund;Institutional	\$11,280	0.09%	0.71%	32%	-0.06
Model 2: TIAA-CREF Real Estate Securities Fund;Inst	\$495	0.56%	-1.87%	31%	-0.15

Notes:

[1] BofAML US HY Master II Constrnd is an index and therefore does not have values for Assets Under Management or Fee.

[2] "-" indicates missing data.

[3] The Deutsche Global Growth Fund's and its alternatives' statistics are calculated only for the period from November 2008 to December 2009 as the Deutsche Global Growth Fund's first full month of data is September 2008 and the Vanguard Total World Stock Idx's first full month of data is November 2008.

Sources:

Lipper for Investment Management; Morningstar Direct; Pomerantz Report, PX250.

EXHIBIT 6

Hypothetical Quantitative Special Review & Termination Review Status of Model 2 Pomerantz Benchmarks

Q1 2010 - Q2 2013

Model 2 Pomerantz Benchmark	Active or Passive	Geographic Focus	Q1 2010	Q2 2010	Q3 2010	Q4 2010	Q1 2011	Q2 2011	Q3 2011	Q4 2011	Q1 2012	Q2 2012	Q3 2012	Q4 2012	Q1 2013	Q2 2013
American Funds New Perspective Fund;R5	Active	Non-US														
Dodge & Cox International Stock Fund	Active	Non-US							-	-	-	-	-	-	-	-
Dodge & Cox Stock Fund	Active	US	SR	SR	TR	TR	TR	SR	SR	SR						
Fidelity Capital & Income Fund	Active	US												SR	SR	SR
Fidelity Contrafund	Active	US														
PIMCO Total Return Fund;Institutional	Active	US														
TIAA-CREF Real Estate Securities Fund;Inst	Active	US	SR	TR	SR	SR	SR	SR								

Notes:

[1] A value of "SR" indicates that the fund met the quantitative criteria for Special Review in that particular quarter. A value of "TR" indicates that the fund met the quantitative criteria for Termination Review in that particular quarter. A blank cell indicates that the fund did not meet either the Special Review or the Termination Review quantitative criteria in that particular quarter. A value of "-" indicates that the Actively Managed Proprietary Fund associated with the Model 2 Pomerantz Benchmark was not part of the Plan as of end of quarter.

[2] A "period" for determining Special Review and Termination Review status is defined as a rolling three-year period computed quarterly.

[3] An active fund meets quantitative Special Review criteria if it underperforms its relevant Index and the Peer Group median in 2 consecutive periods.

[4] An active fund meets quantitative Termination Review criteria if it (1) underperforms its relevant Index and ranks in the bottom quartile of its Peer Group in 4 consecutive periods, and (2) underperforms its relevant Index and the Peer Group median in a trailing five-year period.

[5] A fund that meets quantitative Termination Review criteria will be placed on Special Review if it either performed in the top 40% of its peer group or if it exceeded its relevant Index in the past twelve month period.

[6] The peer groups for each Model 2 Pomerantz Benchmark are comprised of mutual funds with the same Lipper classification, index-fund indicator, and fund-of-fund indicator as the Model 2 Pomerantz Benchmark.

Peer funds exclude funds managed by the same company as the Model 2 Pomerantz Benchmark, closed-end funds, ETFs, REITs, master funds, feeder funds, 529 funds, hub & spoke funds, and funds with a distribution channel of "Affinity with an Organization" or "Employee." Peer groups are limited to institutional load and no load mutual funds. Only funds with at least \$100 million in fund assets are included in the peer groups. For mutual funds with multiple share classes that meet these criteria, the share class with the highest return is selected.

Sources:

Expert Report of Steve Pomerantz, Ph.D, PX250; Deutsche Bank Statement of Investment Policies and Objectives (December 2009), JX100; Lipper for Investment Management; Morningstar Direct.

Hypothetical Quantitative Special Review & Termination Review Status of Model 2 Pomerantz Benchmarks

Q3 2013 - Q4 2016

Model 2 Pomerantz Benchmark	Active or Passive	Geographic Focus	Q3 2013	Q4 2013	Q1 2014	Q2 2014	Q3 2014	Q4 2014	Q1 2015	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Q4 2016
American Funds New Perspective Fund;R5	Active	Non-US												-	-	-
Dodge & Cox International Stock Fund	Active	Non-US	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dodge & Cox Stock Fund	Active	US												-	-	-
Fidelity Capital & Income Fund	Active	US	SR	SR	SR	SR										
Fidelity Contrafund	Active	US	SR					SR	SR						SR	SR
PIMCO Total Return Fund;Institutional	Active	US										SR	SR	TR	SR	SR
TIAA-CREF Real Estate Securities Fund;Inst	Active	US				SR			SR	SR					SR	SR

Notes:

[1] A value of "SR" indicates that the fund met the quantitative criteria for Special Review in that particular quarter. A value of "TR" indicates that the fund met the quantitative criteria for Termination Review in that particular quarter. A blank cell indicates that the fund did not meet either the Special Review or the Termination Review quantitative criteria in that particular quarter. A value of "-" indicates that the Actively Managed Proprietary Fund associated with the Model 2 Pomerantz Benchmark was not part of the Plan as of end of quarter.

[2] A "period" for determining Special Review and Termination Review status is defined as a rolling three-year period computed quarterly.

[3] An active fund meets quantitative Special Review criteria if it underperforms its relevant Index and the Peer Group median in 2 consecutive periods.

[4] An active fund meets quantitative Termination Review criteria if it (1) underperforms its relevant Index and ranks in the bottom quartile of its Peer Group in 4 consecutive periods, and (2) underperforms its relevant Index and the Peer Group median in a trailing five-year period.

[5] A fund that meets quantitative Termination Review criteria will be placed on Special Review if it either performed in the top 40% of its peer group or if it exceeded its relevant Index in the past twelve month period.

[6] The peer groups for each Model 2 Pomerantz Benchmark are comprised of mutual funds with the same Lipper classification, index-fund indicator, and fund-of-fund indicator as the Model 2 Pomerantz Benchmark. Peer funds exclude funds managed by the same company as the Model 2 Pomerantz Benchmark, closed-end funds, ETFs, REITs, master funds, feeder funds, 529 funds, hub & spoke funds, and funds with a distribution channel of "Affinity with an Organization" or "Employee." Peer groups are limited to institutional load and no load mutual funds. Only funds with at least \$100 million in fund assets are included in the peer groups. For mutual funds with multiple share classes that meet these criteria, the share class with the highest return is selected.

Sources:

Expert Report of Steve Pomerantz, Ph.D, PX250; Deutsche Bank Statement of Investment Policies and Objectives (December 2009), JX100; Lipper for Investment Management; Morningstar Direct.

EXHIBIT 7

Exhibit 7

**Comparison of Cumulative Annualized Returns for Actively Managed Proprietary Funds to
the Top 5 Most Frequently Held Funds in the Same Morningstar Category As Identified by Dr. Pomerantz**

January 2010 - September 2017

Actively Managed Proprietary Fund	Cumulative Annualized Return			Return within or above Alternative Return Range
	Actively Managed Proprietary Option	Minimum Alternative Return	Maximum Alternative Return	
Deutsche Capital Growth Fund	11.8%	10.4%	14.7%	X
Deutsche Core Fixed Income Fund	4.2%	3.6%	4.4%	X
Deutsche CROCI International Fund	3.5%	8.9%	14.7%	
Deutsche Global Growth Fund	5.4%	7.3%	9.3%	
Deutsche High Income Fund	7.7%	6.6%	8.4%	X
Deutsche Large Cap Value Instl	8.6%	9.7%	12.3%	
Deutsche Real Estate Sec Instl	12.6%	10.2%	13.0%	X
Number of Actively Managed Proprietary Funds Included in Dr. Pomerantz's Analysis				7
Number of Actively Managed Proprietary Fund Returns Greater than At Least One of the Top 5 Alternatives				4
<i>Percent</i>				<i>57%</i>

Notes:

[1] The time period during the class period from December 21, 2009 through December 31, 2009 is excluded from this analysis.

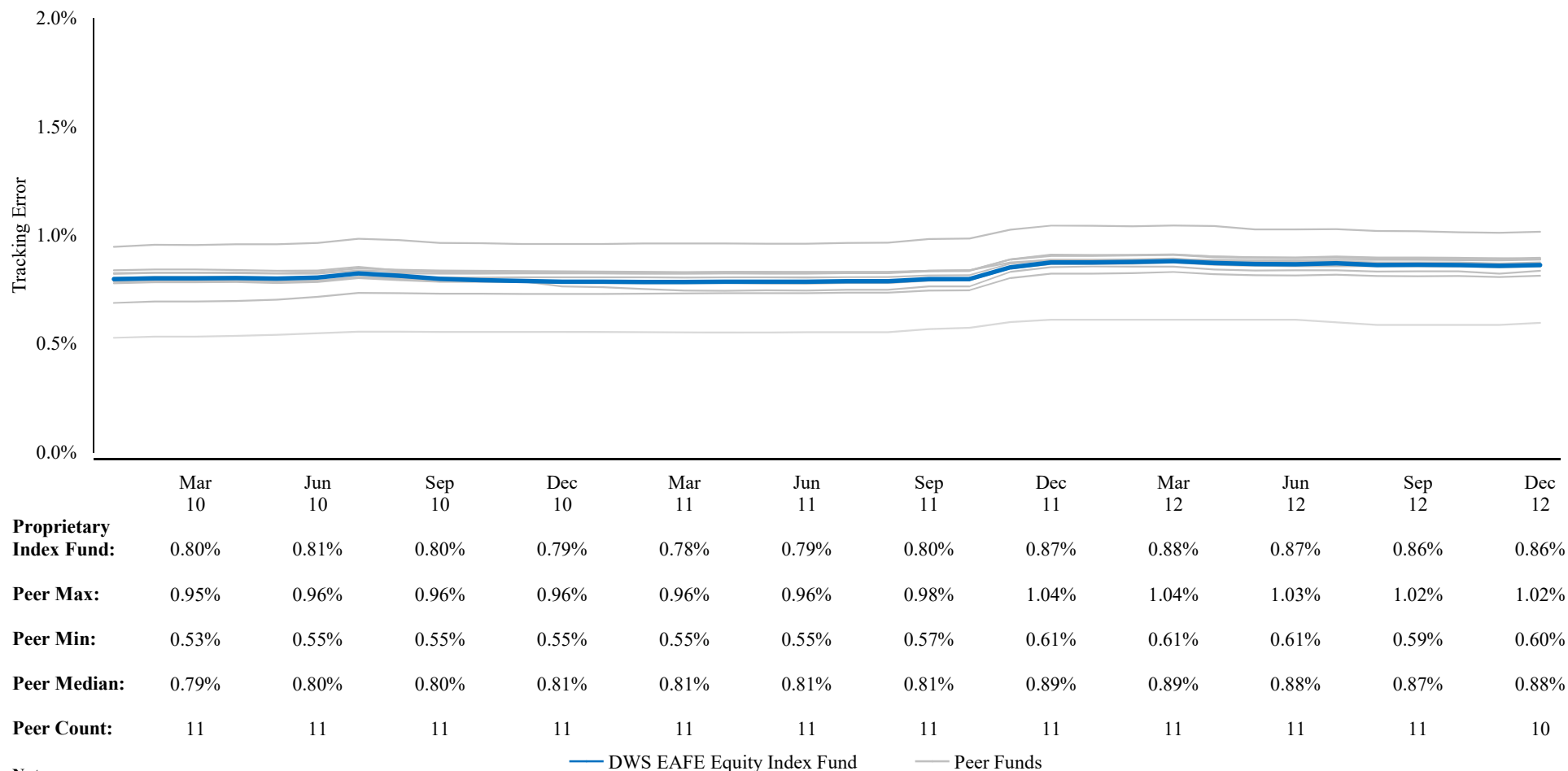
[2] In his selection of Pomerantz Benchmarks for Model 2, Dr. Pomerantz states that he first identifies the Top 5 most frequently held funds by plans with greater than \$250M in assets.

Sources:

MSP Participant Account Balance Data, DX057; Morningstar Direct; Pomerantz Report, PX250; Dr. Pomerantz's Backup File (PX322.XLSX); Fidelity Trial Balance DB MSP January 1, 2017 to January 31, 2017, DX142.0003; 2017-04 Trial Balance, JX138.0003; Deutsche Bank Matched Savings Plan Quarterly Investment Review, Third Quarter 2016, JX187.

EXHIBIT 8

Comparison of Rolling 5-Year Tracking Error with Peers
DWS EAFE Equity Index Fund
January 2010 - December 2012



Notes:

[1] The peer groups for each year are constructed from index funds with the same Primary Prospectus Benchmark and Morningstar Category as the Proprietary Index Fund. Peer groups are calculated separately for each month; they exclude funds that have missing returns data. For mutual funds with multiple share classes, the share class with the maximum return is included in the peer group.

[2] The analysis is only performed for the months in which the Proprietary Index Fund was in the Plan and had data available for the trailing five-year period. The tracking error of the Proprietary Index Fund is represented by the blue line.

[3] Tracking Error is calculated as the standard deviation of the monthly difference between the returns of the fund and its benchmark.

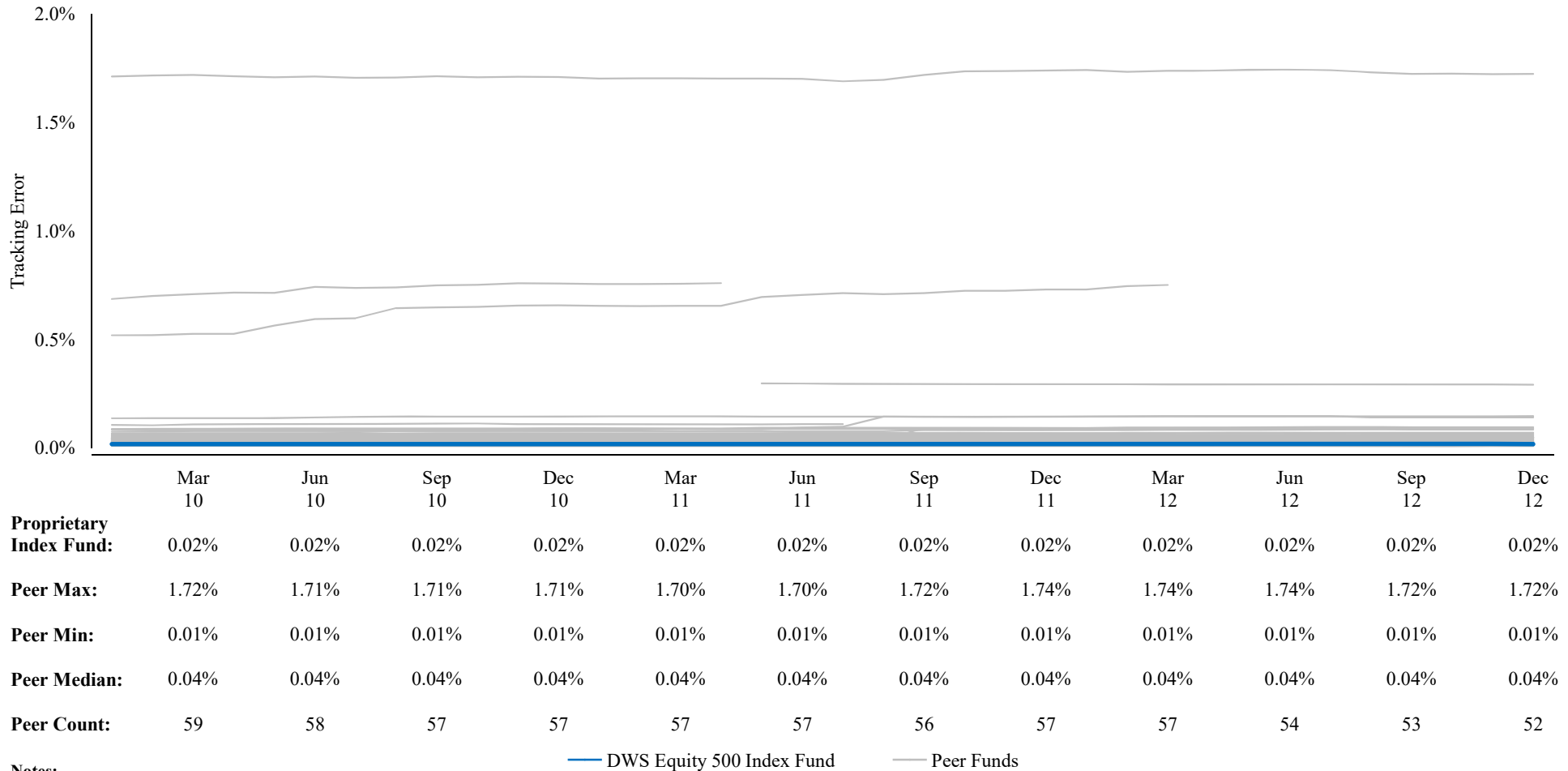
[4] The Benchmark of the Proprietary Index Fund is MSCI EAFE NR USD. The Morningstar Category of the Proprietary Index Fund is Foreign Large Blend.

Source:

Morningstar Direct.

Exhibit 8

Comparison of Rolling 5-Year Tracking Error with Peers
DWS Equity 500 Index Fund
January 2010 - December 2012

**Notes:**

[1] The peer groups for each year are constructed from index funds with the same Primary Prospectus Benchmark and Morningstar Category as the Proprietary Index Fund. Peer groups are calculated separately for each month; they exclude funds that have missing returns data. For mutual funds with multiple share classes, the share class with the maximum return is included in the peer group.

[2] The analysis is only performed for the months in which the Proprietary Index Fund was in the Plan and had data available for the trailing five-year period. The tracking error of the Proprietary Index Fund is represented by the blue line.

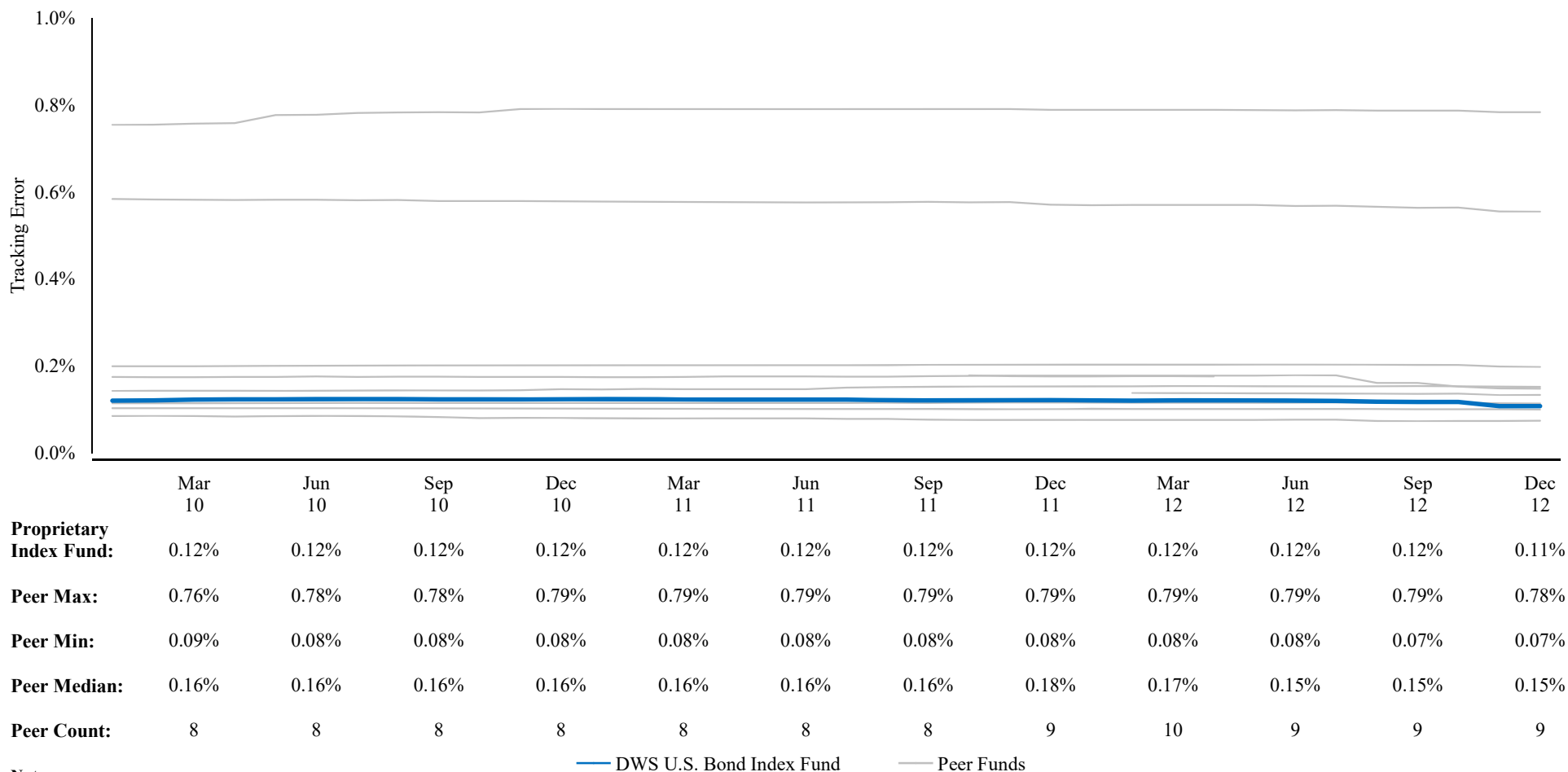
[3] Tracking Error is calculated as the standard deviation of the monthly difference between the returns of the fund and its benchmark.

[4] The Benchmark of the Proprietary Index Fund is S&P 500 TR USD. The Morningstar Category of the Proprietary Index Fund is Large Blend.

Source:

Morningstar Direct.

Comparison of Rolling 5-Year Tracking Error with Peers
DWS U.S. Bond Index Fund
January 2010 - December 2012



Notes:

[1] The peer groups for each year are constructed from index funds with the same Primary Prospectus Benchmark and Morningstar Category as the Proprietary Index Fund. Peer groups are calculated separately for each month; they exclude funds that have missing returns data. For mutual funds with multiple share classes, the share class with the maximum return is included in the peer group.

[2] The analysis is only performed for the months in which the Proprietary Index Fund was in the Plan and had data available for the trailing five-year period. The tracking error of the Proprietary Index Fund is represented by the blue line.

[3] Tracking Error is calculated as the standard deviation of the monthly difference between the returns of the fund and its benchmark.

[4] The Benchmark of the Proprietary Index Fund is BBgBarc US Agg Bond TR USD. The Morningstar Category of the Proprietary Index Fund is Intermediate-Term Bond.

Source:

Morningstar Direct.

APPENDIX A

Curriculum Vitae

WALTER N. TOROUS

MIT Center for Real Estate

Office Address:

Center for Real Estate
Massachusetts Institute of Technology
Building 9-332
77 Massachusetts Avenue
Cambridge, MA, 02139
Telephone: (Office) (617) 324-7027

E-Mail wtorous@mit.edu

Home Address

50 Longwood Avenue, Unit #916
Brookline, MA, 02446
Telephone: (310) 234-1090

Academic Degrees

B. Math. University of Waterloo, Statistics and Economics, 1976
Ph. D. University of Pennsylvania, Economics, 1981

Academic Appointments

1980-81	Graduate School of Business Administration, University of Michigan, Lecturer
1981-85	Graduate School of Business Administration, University of Michigan, Assistant Professor
1986-87	Graduate School of Management, University of California, Los Angeles, Visiting Assistant Professor
1987-90	Graduate School of Management, University of California, Los Angeles, Assistant Professor

1990-95	John E. Anderson Graduate School of Management, University of California, Los Angeles, Associate Professor
1995-97	London Business School, Corporation of London Professor of Finance
1995-2006	John E. Anderson Graduate School of Management, University of California, Los Angeles, Professor
1997-2003	Director, Richard S. Ziman Real Estate Center, John E. Anderson Graduate School of Management, University of California, Los Angeles
2006-12	John E. Anderson Graduate School of Management, University of California, Los Angeles, Lee and Seymour Graff Endowed Professor
2009-11	Visiting Professor Center for Real Estate Massachusetts Institute of Technology, Cambridge, MA
2012-Present	Senior Lecturer Center for Real Estate / Sloan School of Management Massachusetts Institute of Technology, Cambridge, MA

Professional Activities

Journal of Housing Economics, Associate Editor, 1991 - Present
Journal of Real Estate Finance and Economics, Associate Editor, 1992 - Present
Real Estate Economics,

Associate Editor, 1993 - 2005, 2015 - Present
Editor, 2006 - 2014

Pacific-Basin Finance Journal, Associate Editor, 1997- 2003
Economic Notes, Associate Editor, 1999 - 2011

Ad hoc referee for Journal of Finance, Journal of Financial and Quantitative Analysis, Journal of Banking and Finance, Journal of Business, Review of Financial Studies, Journal of Financial Economics, Journal of Money, Credit, and Banking, Management Science, Journal of Empirical Finance, Journal of International Money and Finance

Member:
American Finance Association, 1980 - Present

American Real Estate and Urban Economics Association, 1990 - Present
Western Finance Association, 1980 - Present
Associate Program Chair, 1990
Board of Directors, 1991-94

Refereed Publications

1. Ball, C. A., and Torous, W. N., "A Simplified Jump Process for Common Stock Returns," Journal of Financial and Quantitative Analysis, 18:1, pp. 53-65, March 1983.
2. Ball, C. A., and Torous, W. N., "Bond Price Dynamics and Options," Journal of Financial and Quantitative Analysis, 18:4, pp. 517-531, December 1983.
3. Ball, C. A., and Torous, W. N., "The Maximum Likelihood Estimation of Security Price Volatility: Theory, Evidence, and Application to Option Pricing," Journal of Business, 57:1, pp. 97-112, January 1984.
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5. Ball, C. A., Torous, W. N., and Tschoegl, A. E., "On Inferring Standard Deviations from Path Dependent Options," Economic Letters, 18, pp. 377-380, 1985.
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7. Ball, C. A., Torous, W. N., and Tschoegl, A. E., "An Empirical Investigation of the EOE Gold Options Market," Journal of Banking and Finance, 9:1, pp. 101-113, March 1985.
8. Ball, C. A., and Torous, W. N., "On Jumps in Common Stock Prices and Their Impact on Call Option Pricing," Journal of Finance, 40:1, pp. 155-173, March 1985.
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10. Ball, C. A., and Torous, W. N., "Futures Options and the Volatility of Futures Prices," Journal of Finance, 41:4, pp. 857-870, September 1986.

11. Ball, C. A., and Torous, W. N., "Investigating Security Price Performance in the Presence of Event Date Uncertainty," Journal of Financial Economics, 22, pp. 123-153, October 1988.
12. Schwartz, E. S., and Torous, W. N., "Prepayment and the Valuation of Mortgage-Backed Securities," Journal of Finance, 44:2, pp. 375-392, June 1989.
13. Titman, S., and Torous, W. N., "Valuing Commercial Mortgages: An Empirical Investigation of the Contingent-Claims Approach to Valuing Commercial Mortgages," Journal of Finance, 44:2, pp. 345-373, June 1989.

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14. Franks, J. R., and Torous, W. N., "An Empirical Investigation of U.S. Firms in Reorganization," Journal of Finance, 44:3, pp. 747-769, July 1989.

Reprinted in Corporate Bankruptcy and Distressed Restructurings: Analytical Issues and Investment Opportunities, E. Altman (Editor), Irwin, 1992.

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16. Haugen, R. A., Talmor, E., and Torous, W. N., "The Effect of Volatility Changes on the Level of Stock Prices and Subsequent Expected Returns," Journal of Finance, 46:8, pp. 985-1007, July 1991.

17. Geske, R. L., and Torous, W. N., "Skewness, Kurtosis, and Black-Scholes Option Mispricing," Statistical Papers, 32, pp. 299-309, December 1991.

18. Schwartz, E. S., and Torous, W. N., "Prepayment, Default, and the Valuation of Mortgage Pass-Through Securities," Journal of Business, 65:2, pp. 221-239, April 1992.

19. Franks, J. R., and Torous, W. N., "Lessons from a Comparison of U.S. and U.K. Insolvency Codes," Oxford Review of Economic Policy, 8:3, pp. 70-82, September 1992.

Reprinted in Journal of Applied Corporate Finance, pp. 95-103, January 1993.

20. Schwartz, E. S., and Torous, W. N., "Mortgage Prepayment and Default Decisions: A Poisson Regression Approach," Journal of the American Real Estate and Urban Economics Association, 21:4, pp. 431-448, March 1993.

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Reprinted in Studies in Empirical Corporate Finance, M. Brennan (Editor), Edward Elgar, 2001.
22. Ball, C. A., and Torous, W. N., "On Unit Roots and the Estimation of Interest Rate Dynamics," Journal of Empirical Finance, 3:2, pp. 215-238, June 1996.
23. Franks, J. R., Nyborg, K., and Torous, W. N., "A Comparison of U. K, U. S., and German Insolvency Codes," Financial Management, 25:3, pp. 274-301, Autumn 1996.
24. Roma, A., and Torous, W. N., "On the Cyclical Behavior of Interest Rates," Journal of Finance, 52:4, pp. 1519-1542, September 1997.
25. Brennan, M. J., and Torous, W. N., "Individual Decision Making and Investor Welfare," Economic Notes, 28:2, pp. 119-143, July 1999.
26. Ball, C. A., and Torous, W. N., "The Stochastic Volatility of Short-term Interest Rates: Some International Evidence," Journal of Finance, 54:6, pp. 2339-2359, December 1999.

Reprinted in Model Risk: Concepts, Calibration, and Pricing, R. Gibson (Editor), Risk Books, 2000.
27. Ball, C. A., and Torous, W. N., "Stochastic Correlation Across International Stock Markets," Journal of Empirical Finance, 7:3-4, pp. 373-388, November 2000.
28. Torous, W. N., Yan, S. and Valkanov, R., "On Predicting Stock Returns with Nearly Integrated Explanatory Variables," Journal of Business, 77:4, pp. 937-966, October 2004.
29. Dierker, M., Quan, D., and Torous, W. N., "Pricing the Defeasance Option in Securitized Commercial Mortgages," Real Estate Economics, 33:4, pp. 663-680, Winter 2005.
30. Berardi, A., and Torous, W. N., "Term Structure Forecasts of Long Term Consumption Growth," Journal of Financial and Quantitative Analysis, 40:2, pp. 241-258, June 2005.
31. Brennan, M. J., Lee, F., and Torous, W. N., "Dollar Cost Averaging," Review of Finance, 9:4, pp. 509-535, 2005.

32. Hong, H, Torous, W. N., and Valkanov, R., “Do Industries Lead Stock Markets?,” Journal of Financial Economics, 83:2, pp. 367-396, 2007.
33. Schwartz, E. S., and Torous, W. N., “Commercial Office Space: Testing the Implications of Real Options Model with Competitive Interactions,” Real Estate Economics, 35:1, pp. 1-20, 2007.

Awarded Edwin S. Mills Prize for best paper in Real Estate Economics for 2007.
34. Plazzi, A., Torous, W. N., and Valkanov, R., “The Cross-Sectional Dispersion of Commercial Real Estate Returns and Rent Growth: Time Variation and Economic Fluctuations,” Real Estate Economics, 36:3, pp. 403-429, 2008.
35. Plazzi, A., Torous, W. N., and Valkanov, R., “Expected Returns and the Expected Growth in Rents of Commercial Real Estate,” Review of Financial Studies, 23:9, pp. 3469-3519, 2010.
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37. Linnainmaa, J. T., Torous, W. N., and Yae, J., “Reading the Tea Leaves: Model Uncertainty, Robust Forecasts and the Autocorrelation of Analysts’ Forecast Errors,” Journal of Financial Economics, 122:1, pp.42-64, 2016.

Chapters in Books

38. Geske, R. L., and Torous, W. N., “Black-Scholes Option Pricing and Robust Variance Estimation,” pp. 49-69, in Options: Recent Advances in Theory and Practice, S. Hodges (Editor), Manchester University Press, 1990.
39. Schwartz, E. S., and Torous, W. N., “Caps on Adjustable Rate Mortgages: Valuation, Insurance, and Hedging,” pp. 283-303, in Financial Markets and Financial Crises, R. G. Hubbard (Editor), University of Chicago Press, 1991.
40. Betker, B. L., Franks, J. R., and Torous, W. N., “Are Stockholders Better Off When Debt is Restructured Privately?,” pp. 391-400, in Corporate Bankruptcy and Distressed Restructuring: Analytical Issues and Investment Opportunities, E. Altman (Editor), Irwin, 1992.
41. Torous, W. N., “Mortgage Backed Securities,” in North-Holland Handbook of Operations Research and Management Science, R. A. Jarrow, V. Maksimovic, and W. T. Ziemba (Editors), North-Holland, 1995.

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45. Ghysels, E., Plazzi, A., Torous, W. N., and R. Valkanov, R., “Forecasting Real Estate Prices,” in Handbook of Economic Forecasting, Volume 2A, G. Elliott and A. Timmermann (Editors), North-Holland, 2013.

Submitted Manuscripts

46. Agarwal, S., Liu, C., Torous, W. N., and Yao, V. W., “The Mistakes People Make: Financial Decision Making when Buying and Owning a Home,” *revise and resubmit*, Review of Finance, 2016.
47. Ghent, A., Torous, W. N., and Valkanov, R., “Complexity in Structured Finance,” *revise and resubmit*, Review of Economic Studies, 2016.

Working Papers

48. Bokhari, S., Torous, W. N., and Wheaton, W., “Leverage in the Housing Boom and Bust,” 2015.
49. Ghent, A., Miltersen, K., and Torous, W. N., “Second Mortgages: Valuation and Implications for the Performance of Structured Financial Products,” 2016.
50. Plazzi, J, and Torous, W.N., “Does Corporate Governance Matter?: Evidence from the AGR Governance Rating,” 2016.

APPENDIX B

WALTER N. TOROUS

List of Testimony in the Last Five Years

- 2018 – *Residential Funding Company, LLC v. Home Loan Center, Inc.*, In the United States District Court for the District of Minnesota, Case No. 14-cv-01716 (SRN/HB)
Provided expert report and deposition testimony.
- 2018 – *Residential Funding Company, LLC v. Decision One Mortgage Company, LLC*, In the United States District Court for the District of Minnesota, Case No. 14-cv-1737 (MJD/JSM)
Provided expert report and deposition testimony.
- 2018 – *Residential Funding Company, LLC v. HSBC Mortgage Corp. (USA)*, In the United States Bankruptcy Court for the Southern District of New York, Case No. 14-01915 (MG)
Provided expert report and deposition testimony.
- 2018 – *Federal Deposit Insurance Corporation as Receiver for United Western Bank v. RBS Acceptance Inc., et al.*, In the United States District Court for the District of Colorado, Case No. 1:14-CV-00418-PAB-MJW
Provided expert report and deposition testimony.
- 2018 – *Federal Deposit Insurance Corporation as Receiver for Guaranty Bank v. Deutsche Bank Securities Inc., et al.*, In the United States District Court for the Western District of Texas Austin Division, Case No. 1:14-cv-00129-SS
Provided expert report and deposition testimony.
- 2018 – *Federal Deposit Insurance Corporation as Receiver for Guaranty Bank v. RBS Securities Inc., et al.*, In the United States District Court for the Western District of Texas Austin Division, Case No. 1:14-cv-00126-SS
Provided expert report and deposition testimony.
- 2017 – *Ramon Moreno, et al. v. Deutsche Bank Americas Holding Corp., et al.*, In the United States District Court for the Southern District of New York, Case No. 1:15-cv-09936 (LGS)
Provided expert report and deposition testimony.
- 2017 – *Lou Baker, et al. v. SeaWorld Entertainment, Inc., et al.*, In the United States District Court for the Southern District of California, Case No. 3:14-cv-02129-MMA-AGS
Provided expert report and deposition testimony.

2017 – *Old Republic Insurance Company and Old Republic Insured Credit Services, Inc., n/k/a Republic Insured Credit Services, Inc. v. The Bank of New York Mellon, BNY Mellon Trust of Delaware, Countrywide Bank, FSB, n/k/a Bank of America, N.A., Countrywide Home Loans Servicing, LP, n/k/a Bank of America, N.A.; Countrywide Bank, FSB, n/k/a Bank of America, N.A., Countrywide Home Loans, Inc., Countrywide Home Loans Servicing, LP, n/k/a Bank of America, N.A., The Bank of New York Mellon, and BNY Mellon Trust of Delaware v. Old Republic Insurance Company*; In the Circuit Court of Cook County, Illinois for the County Department, Chancery Division, Case No. 08 CH 47501

Provided expert report and deposition testimony.

2017 – *Royal Park Investments SA/NV v. HSBC Bank USA, National Association*, In the United STATES District Court for the Southern District of New York, Case No. 14-cv-8175-LGS-SN; *BlackRock Balanced Capital Portfolio (FI), et al. v. HSBC Bank USA, National Association*, In the United States District Court for the Southern District of New York, Case No. 14-cv-9366-LGS-SN

Provided expert report and deposition testimony.

2017 – *U.S. Bank National Association, solely in its capacity as Trustee for Citigroup Mortgage Loan Trust 2007-AR7 v. Citigroup Global Markets Realty Corp. and CitiMortgage, Inc.*, In the United States District Court for the Southern District of New York, Civil Action No. 13 Civ. 6989 (GBD)

Provided expert report and deposition testimony.

2016 – *U.S. Bank National Association, solely in its capacity as Trustee of the Home Equity Asset Trust 2007-1 (HEAT 2007-1) v. DLJ Mortgage Capital, Inc.*, In the Supreme Court of the State of New York County of New York, Index No. 650369/2013

Provided expert report and deposition testimony.

2016 – *Federal Deposit Insurance Corporation v. Credit Suisse First Boston Mortgage Securities Corp., et al.*, In the Circuit Court of Montgomery County, Alabama, Civil Action No. 03-cv-2012-901035.00 and *Federal Deposit Insurance Corporation v. RBS Securities Inc.*, In the Circuit Court of Montgomery County, Alabama, Civil Action No. 03-cv-2012-901036.00

Provided expert report and deposition testimony.

2016 – *Home Equity Mortgage Trust Series 2006-1, et al. v. DLJ Mortgage Capital, Inc. and Select Portfolio Servicing, Inc.*, In the Supreme Court of the State of New York, County of New York, Index No. 156016; *Home Equity Mortgage Trust Series 2006-5, by U.S. Bank National Association, solely in its capacity as Trustee v. DLJ Mortgage Capital, Inc. and Select Portfolio Servicing, Inc.*, In the Supreme Court of the State of New York, County of New York, Index No. 653787

Provided expert report and deposition testimony.

2016 – *Federal Deposit Insurance Corporation v. RBS Securities Inc.*, In the Circuit Court of Montgomery County, Alabama, Civil Action No. 03-cv-2012-901036.00

Provided expert report and deposition testimony.

2016 – *National Credit Union Administration Board v. RBS Securities Inc., et al.*, In the United States District Court for the Central District of California, Case No. 11-cv-5887 GW (JEM)

Provided expert report and deposition testimony.

2016 – *National Credit Union Administration Board v. RBS Securities Inc., et al.*, In the United States District Court for the District of Kansas, Case No. 11-cv-2340 JWL (JPO)

Provided expert report and deposition testimony.

2016 – *Federal Home Loan Bank of San Francisco v. Deutsche Bank Securities Inc., et al.*, In the Superior Court of the State of California and for the City and County of San Francisco, Case No. CGC-10-497839

Provided expert report and deposition testimony.

2016 – *Federal Housing Finance Agency v. The Royal Bank of Scotland Group PLC, et al.*, In the United States District Court of Connecticut, Case No. 3:11-cv-01383 (AWT)

Provided expert report and deposition testimony.

2015 – *Deutsche Bank National Trust Company, as Trustee for Morgan Stanley ABS Capital I Inc. Trust 2007-HE6 v. Decision One Mortgage Company, LLC*, In the Circuit Court of Cook County, Illinois County Department – Law Division, Case No. 2013 L 005823

Provided expert report and deposition testimony.

2015 – *New Jersey Carpenters Health Fund, on Behalf of Itself and All Others Similarly Situated v. Novastar Mortgage, Inc., et al.*, In the United States District Court for the Southern District of New York, Case No. 08-cv-5310 (DAB)

Provided expert report and deposition testimony.

2015 – *In Re MF Global Holdings Limited Securities Litigation*, In the United States District Court Southern District of New York, Case No. 1:11-cv-07866-VM

Provided expert report and deposition testimony.

2015 – *Federal Home Loan Bank of Seattle, a bank created by federal law v. Deutsche Bank Securities Inc., a Delaware corporation; Deutsche Alt-A Securities, Inc., a Delaware corporation; and DB Structured Products, Inc., a Delaware corporation*, In the Superior Court of Washington for King County, Case No. 09-2-46351-4 SEA

Provided expert report and deposition testimony.

2015 – *Federal Home Loan Bank of Seattle, a bank created by federal law v. RBS Securities Inc., f/k/a/ Greenwich Capital Markets, Inc., a Delaware Corporation; Greenwich Capital Acceptance, Inc., a Delaware Corporation; and RBS Holdings USA, Inc., f/k/a Greenwich Capital Holdings, Inc., a Delaware Corporation*, In the Superior Court of Washington for King County, Case No. 09-2-46347-6

Provided expert report and deposition testimony.

- 2015 – *Fort Worth Employees’ Retirement Fund, On Behalf of Itself and All Others Similarly Situated v. J.P. Morgan Chase & Co., et al.*, In the United States District Court for the Southern District of New York, Case No. 1:09-cv-03701 (JPO)
Provided expert report and deposition testimony.
- 2014 – *Federal Home Loan Bank of Seattle, a bank created by federal law v. RBS Securities Inc., f/k/a/ Greenwich Capital Markets, Inc., a Delaware Corporation; Greenwich Capital Acceptance, Inc., a Delaware Corporation; and RBS Holdings USA, Inc., f/k/a Greenwich Capital Holdings, Inc., a Delaware Corporation*, In the Superior Court of Washington for King County, Case No. 09-2-46347-6
Provided expert report and deposition testimony.
- 2014 – *Federal Housing Finance Agency, as Conservator for the Federal National Mortgage Association and the Federal Home Loan Mortgage Corporation v. HSBC North America Holdings Inc., HSBC USA Inc., HSBC Markets (USA) Inc., HSBC Bank USA, N.A., HSI Asset Securitization Corporation, HSBC Securities (USA) Inc., Neal Leonard, Gerard Mattia, Todd White Norman Chaleff, and Jon Voigtman*, In the United States District Court for the Southern District of New York, Case No. 11 Civ. 6189 (DLC)
Provided expert report and deposition testimony.
- 2014 – *Massachusetts Mutual Life Insurance Company v. DB Structured Products, Inc., et al.*, In the United States District Court for the District of Massachusetts, Case No. 3:11-cv-30039-MGM
Provided expert report and deposition testimony.
- 2014 – *New Jersey Carpenters Health Fund, New Jersey Carpenters Vacation Fund, and Boilermaker Blacksmith National Pension Trust, on Behalf of Themselves and All other Similarly Situated v. Residential Capital, LLC. et al.*, In the United States District Court for the Southern District of New York, Civil Action No. 08-cv-8781 (HB)
Provided expert report and deposition testimony.
- 2014 – *Western and Southern Life Insurance Company, et al., v. DLJ Mortgage Capital, Inc. et al.*, In the Court of Common Pleas, Hamilton County, Ohio, No. A 1105352
Provided expert report and deposition testimony.
- 2013 – *In Re IndyMac Mortgage-Backed Securities Litigation*, In the United States District Court for the Southern District of New York, Civil Action No. 09-CIV-04583 (LAK)
Provided expert report and deposition testimony.
- 2013 – *MBIA Insurance Corporation v. J.P. Morgan Securities LLC (f/k/a Bear, Stearns & Co. Inc.)*, In the Supreme Court for the State of New York County of Westchester, No. 64676/2012
Provided expert report and deposition testimony.

APPENDIX C

Appendix C
Glossary of Terms

Term	Definition
15(c) Process	The 15(c) process is the annual process through which the Board of a mutual fund reviews and decides whether to approve the management or advisory agreement with the mutual fund's adviser. The process is often referred to as the "15(c) process," named after the provision of the Investment Company Act of 1940 requiring such approval. As part of the 15(c) process, the Board typically receives a variety of materials, including information about the profitability, performance, and expenses of a fund.
Actively Managed Fund	Managers of actively managed funds often undertake significant research about specific stocks, bonds, market sectors or geographic locations in order to attempt to enhance fund returns or characteristics. This approach enables active fund managers to offer investors the opportunity to earn returns that may exceed the return and/or reduce risk, relative to that of a
Actively Managed Proprietary Funds	Actively Managed Proprietary Funds is a defined term used in this declaration to identify the seven actively managed proprietary funds that were included in the Plan as of the end of 2009. These funds were: (1) the Deutsche Capital Growth Fund, (2) the Deutsche Core Fixed Income Fund, (3) the Deutsche CROCI International Fund, (4) the Deutsche Global Growth Fund, (5) the Deutsche High Income Fund, (6) the Deutsche Large Cap Value Fund, and (7) the Deutsche Real Estate Securities Fund.
Basis Point	One basis point is equal to one hundredth of one percent. The term "basis point" is commonly abbreviated as "bp" and the plural is commonly abbreviated as "bps." For example, 100 bps equal one percent and 50 bps equal 0.5 percent.
Class Period	Class Period is a defined term used in this declaration to identify the period from December 21, 2009 to September 30, 2017.
Collective Investment Trust ("CIT")	A collective investment trust ("CIT") is a pooled investment vehicle that is not registered with the U.S. Securities and Exchange Commission. A CIT is maintained by a bank or a trust, and combines assets across a number of institutions (<i>e.g.</i> , retirement plans). An investment manager establishes the objectives that guide investment decisions for a particular CIT. Also may be called a "commingled pool."
Core Investment Option	For the Deutsche Bank Matched Savings Plan, the Actively Managed Proprietary Funds, the Proprietary Index Funds, and other non-proprietary funds make up the core investment options. The core investment options represent the funds available to Plan participants outside of the self-directed brokerage window.
Defendants	Defendants is a defined term used in this declaration to identify the defendants in this matter, who are Deutsche Bank Americas Holdings Corp., Deutsche Bank Matched Savings Plan Investment Committee, Deutsche Bank Americas Holdings Corp. Executive Committee, Richard O'Connell, John Arvanitis, Robert Dibble, Tim Dowling, Richard Ferguson, James Gnall, Louis Jaffe, Patrick McKenna, David Pearson, Joseph Rice, Scott Simon, Andrew Threadgold, and James Volkwein.
Defined Contribution Plan / 401(k) Plan	Defined contribution plans, including 401(k) plans, are retirement plans typically provided by employers (or plan sponsors) that enable an employee (or participant) to contribute money to an individual account that the employee (or participant) controls. The plan sponsor may also contribute to the individual account, in some cases, by matching a certain percentage of a participant's contributions or making other contributions.
Expense Ratio	A mutual fund provides its investors with an integrated bundle of services that includes portfolio management, recordkeeping, distribution, and shareholder services. The costs of the bundle of services received are measured by what is referred to as an expense ratio. All open-end mutual funds make public filings with the SEC in the form of annual reports and prospectuses. These filings report the expense ratio for each mutual fund share class and a description of the services provided.
Gross Return	The gross return is the return that a portfolio or fund receives from all of its investment activities.

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Term	Definition
Lipper Classification	A Lipper classification is assigned by Lipper to a fund based on the underlying investments in the fund. Lipper assigns funds to a given Lipper classification based on the fund's investment style as well as the market capitalization and geographic focus of the underlying investments.
Lipper Peer Group	A Lipper peer group is a group of mutual funds that Lipper considers comparable to a given fund based on certain characteristics such as fund type, investment objective or classification, fee structure, asset level comparability, and operating structure and attributes.
Morningstar Category	A Morningstar category is assigned by Morningstar to a fund based on the underlying investments in the fund. Morningstar places funds in a given Morningstar category based on their portfolio statistics and compositions over the past three years.
Net Return	The net return is the return that investors receive from their investments in a portfolio or fund after deducting all fees and expenses associated with their investments.
Passively Managed Fund	A passively managed fund is a fund that typically purchases all or a representative sample of a given index in order to track the performance of that index.
Plaintiffs	Plaintiffs is a defined term used in this declaration to identify the plaintiffs. Plaintiffs are Ramon Moreno, Donald O'Halloran, Omkhar Arasaratnam, Baiju Gajjar, and Rajath Nagaraja, individually and as representatives of the Class, and on behalf of the Deutsche Bank Matched Savings Plan.
Plan	Plan is a defined term used in this declaration to identify the Deutsche Bank Matched Savings Plan. The Deutsche Bank Matched Savings Plan is a defined contribution 401(k) plan covering current and former employees of Deutsche Bank and its affiliates. Deutsche Bank Americas Holdings Corp. maintains the Plan.
Proprietary Index Funds	Proprietary Index Funds is a defined term used in this declaration to identify the three Proprietary Index Funds that were included in the Plan as of the end of 2009. These three funds were: (1) the DWS EAFE Equity Index Fund, (2) the DWS Equity 500 Index Fund, and (3) the DWS U.S. Bond Index Fund.
Prospectus Benchmark	A mutual fund prospectus is a legal document that the SEC requires each fund to make available to potential investors. Typically, the document identifies a market index (or blend of indices) that the fund puts forth to illustrate its investment approach. The performance of this "prospectus benchmark" may then serve as a comparator for the fund's performance.
Qualified Default Investment Alternative ("QDIA")	A QDIA is the default option for Plan participants who do not actively select investment options.
Self-Directed Brokerage Window	A self-directed brokerage window offers participants in a defined contribution plan additional investment options beyond the core investment options offered in the plan. Under the Deutsche Bank Matched Savings Plan, participants may invest up to 90 percent of their assets in the self-directed brokerage window.
Separately Managed Account ("SMA")	A separately managed account ("SMA") is an investment vehicle that is not registered with the U.S. Securities and Exchange Commission. A SMA comprises an investment portfolio of stocks, bonds, cash, etc. following a defined strategy and managed by a money manager. A SMA pools assets from a single investor, and is managed on behalf of that investor. The investor dictates the investment objectives.
Sharpe Ratio	A Sharpe Ratio is a standard performance measure used by the asset management industry to capture reward to risk trade-off. Sharpe Ratios, in industry practice, are commonly calculated as the excess fund return per unit of volatility, where "excess return" is defined as the monthly fund return minus the return of a risk-free asset.
Skewness	The incidence of extreme returns for a particular investment may be measured by the returns' skewness. An investment with returns exhibiting a positive skew has a larger likelihood of achieving modest positive returns and a smaller likelihood of achieving extreme negative returns (relative to an investment with returns exhibiting no particular skew).

Appendix C
Glossary of Terms

Term	Definition
Stable Value Fund	A stable value fund is a capital preservation investment option available in some 401(k) plans and other types of savings plans. Stable value funds are often invested in a high quality, diversified fixed income portfolio that is protected against interest rate volatility by contracts from banks and insurance companies. Stable value funds are designed to preserve capital while providing steady, positive returns.
Standard Deviation	Standard deviation is a measure of dispersion of a set of data from its mean. When applied to the returns of an investment, it informs the historical volatility of that investment. The greater the standard deviation of returns of a security, the greater the variance between each return and the mean, indicating a larger return range and higher volatility. Thus, an investment with a lower standard deviation of returns can be perceived as being less volatile relative to its mean than one with higher standard deviation of returns.
Sub-adviser	A sub-adviser is a company employed by a mutual fund's adviser to assist with the management of a given mutual fund.
Tracking Error	Tracking error is a measure of risk that relates a mutual fund's returns to the performance of a benchmark. Tracking error is calculated as the standard deviation of the monthly difference between the returns of the fund and the benchmark.

APPENDIX D

Appendix D

Actively Managed Proprietary Funds v. Pomerantz Benchmarks
Comparison of Asset Allocation (Based on Net Assets)

2009^[1]

Fund Type	Fund Name	Short-Term Investments	Equity Allocation		Bond Allocation		Other ^[2]
			US	Non-US	US	Non-US	
1 Actively Managed Proprietary Fund	Deutsche Capital Growth Fund	0.6%	98.6%	0.8%	0.0%	0.0%	0.0%
Model 1	Vanguard Growth Index Fund;Institutional	0.1%	99.4%	0.5%	0.0%	0.0%	0.0%
Model 2	Fidelity Contrafund	4.3%	76.7%	18.7%	0.2%	0.0%	0.1%
2 Actively Managed Proprietary Fund	Deutsche Core Fixed Income Fund	11.2%	0.0%	0.0%	90.3%	-2.2%	0.7%
Model 1	Vanguard Total Bond Market Index Fund;Inst	5.4%	0.0%	0.0%	88.3%	6.2%	0.2%
Model 2	PIMCO Total Return Fund;Institutional	4.7%	0.0%	0.0%	78.4%	11.5%	5.4%
3 Actively Managed Proprietary Fund	Deutsche CROCI International Fund	4.0%	0.0%	96.0%	0.0%	0.0%	0.0%
Model 1	Vanguard Total International Stock Index Fund;Inst	0.3%	0.1%	98.6%	0.0%	0.0%	1.0%
Model 2	Dodge & Cox International Stock Fund	2.0%	6.3%	91.9%	0.0%	0.0%	-0.1%
4 Actively Managed Proprietary Fund	Deutsche Global Growth Fund	0.9%	44.8%	53.0%	0.0%	0.0%	1.4%
Model 1	Vanguard Total World Stock Index Fund;Inst	0.5%	40.7%	57.3%	0.0%	0.0%	1.5%
Model 2	American Funds New Perspective Fund;R5	5.8%	35.8%	57.4%	0.7%	0.2%	0.0%
5 Actively Managed Proprietary Fund	Deutsche High Income Fund	0.4%	0.1%	0.0%	78.8%	18.2%	2.5%
Model 1	BofA Merrill Lynch US High Yield Master II Cons TR	--	--	--	--	--	--
Model 2	Fidelity Capital & Income Fund	6.8%	9.1%	0.8%	68.0%	13.5%	1.9%
6 Actively Managed Proprietary Fund	Deutsche Large Cap Value Fund	2.0%	84.0%	14.0%	0.0%	0.0%	0.0%
Model 1	Vanguard Value Index Fund;Institutional	0.0%	99.7%	0.3%	0.0%	0.0%	0.0%
Model 2	Dodge & Cox Stock Fund	1.7%	82.1%	16.1%	0.0%	0.0%	0.2%
7 Actively Managed Proprietary Fund	Deutsche Real Estate Securities Fund	1.0%	99.0%	0.0%	0.0%	0.0%	0.0%
Model 1	Vanguard REIT Index Fund;Institutional	0.5%	99.5%	0.0%	0.0%	0.0%	0.0%
Model 2	TIAA-CREF Real Estate Securities Fund;Inst	1.1%	98.9%	0.0%	0.0%	0.0%	0.0%

Notes:

[1] Asset allocations reflect the latest available data in 2009.

[2] Other category includes positions in preferred stocks, convertible bonds, and unidentified holdings.

Sources:

Morningstar Direct; Pomerantz Report, PX250.

Appendix D

Actively Managed Proprietary Funds v. Pomerantz Benchmarks
Comparison of Asset Allocation by Region

2009^[1]

Fund Type	Fund Name	Africa/ Middle East	Asia	Australasia	Europe	Americas	Not Classified
Equity Asset Allocations by Region							
1 Actively Managed Proprietary Fund	Deutsche Capital Growth Fund	0.8%	0.0%	0.0%	0.0%	99.2%	0.0%
Model 1	Vanguard Growth Index Fund;Institutional	0.0%	0.1%	0.0%	0.5%	99.5%	0.0%
Model 2	Fidelity Contrafund	1.1%	6.3%	0.8%	4.4%	87.3%	0.0%
3 Actively Managed Proprietary Fund	Deutsche CROCI International Fund	0.0%	24.1%	3.8%	72.0%	0.0%	0.0%
Model 1	Vanguard Total International Stock Index Fund;Inst	2.4%	32.6%	6.0%	53.6%	5.4%	0.0%
Model 2	Dodge & Cox International Stock Fund	6.1%	20.5%	0.2%	60.3%	12.8%	0.0%
4 Actively Managed Proprietary Fund	Deutsche Global Growth Fund	2.9%	14.8%	0.6%	30.0%	51.7%	0.0%
Model 1	Vanguard Total World Stock Index Fund;Inst	1.5%	17.9%	3.6%	28.7%	48.4%	0.0%
Model 2	American Funds New Perspective Fund;R5	0.8%	9.1%	2.9%	41.1%	46.1%	0.0%
6 Actively Managed Proprietary Fund	Deutsche Large Cap Value Fund	2.2%	0.0%	0.0%	5.5%	92.3%	0.0%
Model 1	Vanguard Value Index Fund;Institutional	0.0%	0.1%	0.0%	0.1%	99.8%	0.0%
Model 2	Dodge & Cox Stock Fund	0.0%	3.2%	0.0%	12.7%	84.1%	0.0%
7 Actively Managed Proprietary Fund	Deutsche Real Estate Securities Fund	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%
Model 1	Vanguard REIT Index Fund;Institutional	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%
Model 2	TIAA-CREF Real Estate Securities Fund;Inst	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%
Fixed Income Asset Allocations by Region^[2]							
2 Actively Managed Proprietary Fund	Deutsche Core Fixed Income Fund	0.5%	1.4%	0.2%	5.3%	92.6%	0.0%
Model 1	Vanguard Total Bond Market Index Fund;Inst	0.1%	0.4%	0.2%	3.9%	95.3%	0.0%
Model 2	PIMCO Total Return Fund;Institutional	0.2%	0.6%	0.5%	6.5%	92.1%	0.0%
5 Actively Managed Proprietary Fund	Deutsche High Income Fund	0.0%	0.9%	0.6%	9.2%	89.3%	0.0%
Model 1	BofA Merrill Lynch US High Yield Master II Cons TR	--	--	--	--	--	--
Model 2	Fidelity Capital & Income Fund	0.0%	0.5%	1.2%	8.1%	90.2%	0.0%

Notes:

[1] Asset allocations reflect the latest available data in 2009. Allocations for each fund were scaled by Morningstar such that long investments sum to 100 percent.

[2] Fixed Income Asset allocations reflect latest available data in 2011 due to a lack of available Fixed Income data in 2009.

Sources:

Morningstar Direct; Pomerantz Report, PX250.

Appendix D

**Actively Managed Proprietary Funds v. Pomerantz Benchmarks
Comparison of Asset Allocation by Style**

2009^[1]

Equity Asset Allocations by Style							
Fund Type	Fund Name	Growth	Core	Value			
1 Actively Managed Proprietary Fund	Deutsche Capital Growth Fund	72.2%	20.4%	7.4%			
	Model 1 Vanguard Growth Index Fund;Institutional	59.8%	33.8%	6.4%			
	Model 2 Fidelity Contrafund	61.1%	24.4%	14.5%			
3 Actively Managed Proprietary Fund	Deutsche CROCI International Fund	34.7%	31.1%	34.3%			
	Model 1 Vanguard Total International Stock Index Fund;Inst	25.2%	35.4%	39.4%			
	Model 2 Dodge & Cox International Stock Fund	25.4%	44.3%	30.3%			
4 Actively Managed Proprietary Fund	Deutsche Global Growth Fund	25.9%	38.3%	35.8%			
	Model 1 Vanguard Total World Stock Index Fund;Inst	27.7%	34.4%	37.9%			
	Model 2 American Funds New Perspective Fund;R5	50.8%	27.0%	22.2%			
6 Actively Managed Proprietary Fund	Deutsche Large Cap Value Fund	16.8%	27.8%	55.3%			
	Model 1 Vanguard Value Index Fund;Institutional	6.4%	33.0%	60.6%			
	Model 2 Dodge & Cox Stock Fund	18.5%	43.2%	38.3%			
7 Actively Managed Proprietary Fund	Deutsche Real Estate Securities Fund	8.4%	70.4%	21.2%			
	Model 1 Vanguard REIT Index Fund;Institutional	7.5%	62.5%	30.1%			
	Model 2 TIAA-CREF Real Estate Securities Fund;Inst	8.8%	63.7%	27.5%			
Fixed Income Asset Allocations by Style ^[2]							
Fund Type	Fund Name	Cash	Corporate	Derivative	Government	Municipal	Securitized
2 Actively Managed Proprietary Fund	Deutsche Core Fixed Income Fund	1.7%	42.1%	6.1%	9.9%	3.9%	36.3%
	Model 1 Vanguard Total Bond Market Index Fund;Inst	4.1%	20.3%	0.0%	45.3%	0.7%	29.5%
	Model 2 PIMCO Total Return Fund;Institutional	45.2%	11.2%	0.0%	22.8%	1.6%	19.2%
5 Actively Managed Proprietary Fund	Deutsche High Income Fund	0.2%	94.6%	3.9%	1.2%	0.1%	0.1%
	Model 1 BofA Merrill Lynch US High Yield Master II Cons TR	--	--	--	--	--	--
	Model 2 Fidelity Capital & Income Fund	13.1%	84.9%	0.0%	0.5%	0.0%	1.5%

Notes:

[1] Asset allocations reflect the latest available data in 2009. Allocations for each fund were scaled by Morningstar such that long investments sum to 100 percent.

[2] Fixed Income Asset allocations reflect latest available data in 2011 due to a lack of available Fixed Income data in 2009.

Sources:

Morningstar Direct; Pomerantz Report, PX250.